# Uganda Agricultural Productivity Enhancement Program (APEP)

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## Fourth Annual Progress Report

October 2006 to September 2007




October 2007

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October 2006 to September 2007

**DISCLAIMER**

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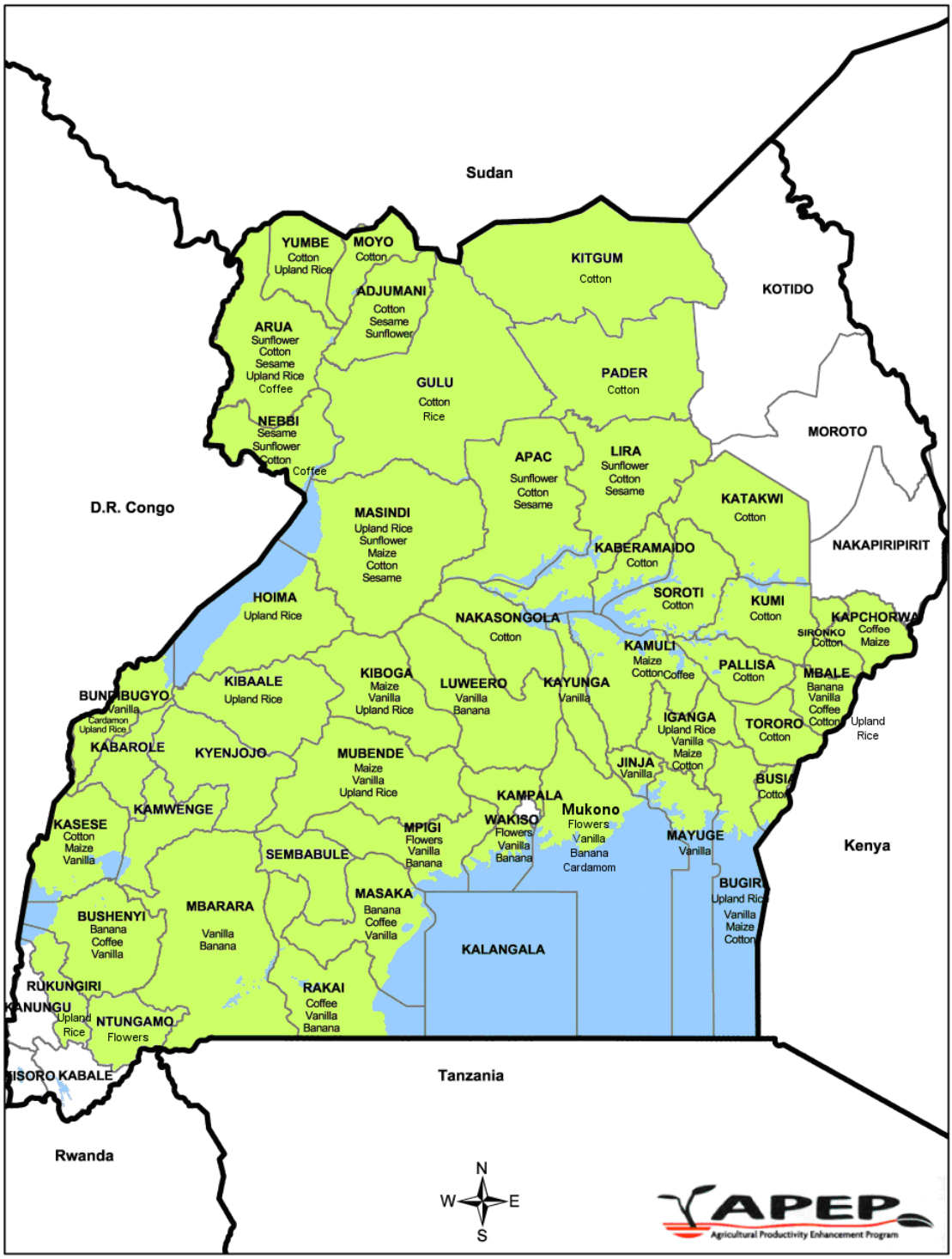
# USAID APEP INTERVENTION AREAS



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# LIST OF ACRONYMS

| | |
|---|---|
| ABDC | AgriBusiness Development Component (of ASPII/DANIDA) |
| ABSPII | Agricultural Biotechnology Support Program II (USAID) |
| ACDI/VOCA | Agricultural Cooperative Development International/ Volunteers in Overseas Cooperative Assistance |
| AGOA | African Growth and Opportunity Act |
| APEP | Agricultural Productivity Enhancement Program |
| ARDC | Agricultural Research and Development Centre (NARO) |
| ASPS II | Agriculture Sector Programme Support (DANIDA) |
| ATAIN | Agribusiness Training and Input Network |
| ATF | Applied Tropical Floriculture |
| ATFC | Applied Tropical Floriculture Course |
| AT Uganda | Appropriate Technology Uganda |
| A2N | African 2000 Network |
| BIO-EARN | East African Regional Programme and Research Network for Biotechnology, Biosafety and Biotechnology Policy Development |
| BBW | Banana Bacterial Wilt |
| CAA | Civil Aviation Authority |
| CAEC | Continuing Agricultural Education Centre |
| CBOs | Community-Based Organizations |
| CDO | Cotton Development Organization |
| CERUDEB | Centenary Rural Development Bank |
| CET | Common External Tariffs |
| CIAT | International Center for Tropical Agriculture |
| CO | Contracting Officer |
| COMPETE | Competitive Private Enterprise and Trade Expansion project (USAID) |
| CoP | Code of Practice |
| COREC | Coffee Research Centre |
| CPPs | Crop Protection Products |
| CT | Conservation Tillage |
| CTO | Cognizant Technical Officer |
| CWD | Coffee Wilt Disease |
| DANIDA | Danish International Development Agency |
| DCs | Depot Committees |
| DCA | Development Credit Authority (USAID) |
| DFCU | Development Finance Company of Uganda |
| DfID | Department for International Development (UK) |
| EAC | East African Community |
| EAFCA | East African Fine Coffee Association |
| ECOTRUST | Environmental Conservation Trust |
| EU | European Union |
| EUREPGAP | European Retailer-Producer Good Agricultural Practices |
| FAQ | Fair Average Quality |
| FEWS NET | Famine Early Warning System Network project (USAID) |
| FHL | Fresh Handling Limited |
| FICA | Farm Inputs Care Centre |
| FIRRI | Fisheries Resources Research Institute |
| FOB | Free on Board |
| FY | Financial Year |
| GDA | Global Development Alliance |
| GDP | Gross Domestic Product |
| GEF | Global Environment Facility |
| GIFAP | Global Crop Protection Association |
| GIS | Geographic Information Systems |
| GMO | Genetically Modified Organism |
| GoU | Government of Uganda |
| ha | hectare(s) |
| HO | Home Office |
| ICP | International Coffee Partners |

| | |
|---|---|
| ICRAF | International Center for Research in Agro Forestry |
| ICR | International Care an Relief |
| ICT | Information and Communications Technology |
| IDEA | Investment in Developing Export Agriculture project (USAID) |
| IDPs | Internally-Displaced Persons |
| IEE | Initial Environmental Examination |
| IEHA | Initiative to End Hunger in Africa |
| IFAD | International Fund for Agricultural Development |
| IFDC | International Fertilizer Development Corporation |
| IFPRI | International Food Policy Research Institute |
| IITA | International Institute of Tropical Agriculture |
| INIBAP | International Network for the Improvement of Banana and Plantain |
| IPM | Integrated Pest Management |
| IPM CRSP | Integrated Pest Management Collaborative Research Support Program |
| ISNAR | International Service for National Agricultural Research |
| ISP | Integrated Strategic Plan |
| ISTA | International Seed Testing Association |
| ITI | International Technology Investment, Ltd. |
| KACOFA | Kapchorwa Commercial Farmers Association |
| kg | kilogram(s) |
| LOP | Life of Project |
| LRA | Lords Resistance Army |
| M&E | Monitoring and Evaluation |
| MAAIF | Ministry of Agriculture, Animal Industry & Fisheries |
| MD | Managing Director (USAID APEP) |
| MEMS | Monitoring and Evaluation Management Services |
| MFI | Microfinance Institution |
| MFPED | Ministry of Finance Planning and Economic Development |
| MOES | Ministry of Education and Sports |
| MoU | Memorandum of Understanding |
| MPS | Milieu Project Sierteelt (Dutch environmental quality standards initiative) |
| MSU | Michigan State University |
| MTCS | Medium-Term Competitiveness Strategy |
| mt | metric ton(s) |
| MUFA | Makerere University Faculty of Agriculture |
| NAADS | National Agricultural Advisory Service |
| NARO | National Agricultural Research Organization |
| NARS | National Agricultural Research System |
| NBC | National Biosafety Committee |
| NBCC | North Bukedi Cotton Company |
| NCBA/CLUSA | National Cooperative Business Association/Cooperative League of the USA |
| NEMA | National Environment Management Authority |
| NGO | Non-Governmental Organization |
| NSCS | National Seed Certification Services |
| NTAE | Non Traditional Agricultural Export |
| NRI | Natural Resources Institute |
| NUCAFE | National Union of Coffee Agribusiness and Farm Enterprises |
| NUEO | Northern Uganda Eco Organic |
| NUOPPA | Northern Uganda Organic Producers and Processors Association |
| OECD | Organization for Economic Cooperation and Development |
| OGS | Out grower Schemes |
| OPV | Open Pollinated Variety |
| P&P | Policy and Procedures |
| PBS | Program for Biosafety Systems (USAID) |
| PEAP | Poverty Eradication Action Plan |
| PERSUAP | Pesticide Regulatory and Safe Use Action Plan |
| PIR | Project Intermediate Results |
| PMA | Plan for Modernisation of Agriculture |
| PMP | Performance Monitoring Plan |
| PMU | Project Management Unit |

| | |
|---|---|
| PO | Producer Organization |
| POT | Producer Organization Trainer |
| PRIME | Productive Resource Investments for Managing the Environment (USAID) |
| RATES | Regional Agricultural Trade Expansion Support (USAID) |
| RATIN | Regional Agricultural Trade Intelligence Network |
| RF | Results Framework |
| Rural SPEED | Rural Savings Promotion & Enhancement of Enterprise Development project (USAID) |
| RNE | Royal Netherlands Embassy |
| SABD | Support to Agri-Business Development Component (DANIDA) |
| SACCO | Savings and Credit Co-operatives |
| SAF | Strategic Activities Fund |
| SAARI | Serere Agricultural and Animal Research Institute |
| SCAA | Specialty Coffee Association of America |
| SCOPE | Strengthening the Competitiveness of Private Enterprise project (USAID) |
| SCRIP | Strategic Criteria for Rural Investments in Productivity (USAID) |
| SEP | Strategic Export Program |
| SG2000 | Sasakawa Global 2000 |
| SME | Small and Medium-Sized Enterprises |
| SO | Strategic Objective |
| SOMED | Support Organization for Micro Enterprises Development |
| SOP | Standard Operating Procedures |
| SPEED | Support for Private Enterprise Expansion and Development project (USAID) |
| STTA | Short-term Technical Assistance |
| TA | Technical Assistance |
| TASO | The AIDS Support Organization |
| TMG | The Mitchell Group |
| ToT | Training-of-Trainers |
| UBL | Uganda Breweries Limited |
| UBOS | Uganda Bureau of Statistics |
| UCDA | Uganda Coffee Development Authority |
| UCE | Uganda Commodity Exchange |
| UCIL | Uganda Crop Industries Limited |
| UFEA | Uganda Flower Exporter's Association |
| UGCEA | Uganda Ginners and Cotton Exporters Association |
| UGTL | Uganda Grain Traders Limited |
| UNADA | Uganda National Agri-Inputs Dealers Association |
| UNBS | Uganda National Bureau of Standards |
| UNCST | Uganda National Council of Science and Technology |
| UNDP | United Nations Development Programme |
| UNEP | United Nations Environment Programme |
| UNEX | Union Export Services |
| UNFFE | Uganda National Farmers Federation |
| UNIDO | United Nations Industrial Development Organization |
| UNVA | Uganda National Vanilla Association |
| UOSPA | Uganda Oilseed Producers and Processors Association |
| UPTOP | Uganda Program for Trade Opportunities and Policy (EU) |
| USAID | United States Agency for International Development |
| USDA | United States Department of Agriculture |
| USh | Uganda Shilling(s) |
| USTA | Uganda Seed Traders Association |
| UWA | Uganda Wildlife Authority |
| VANEX | Uganda Vanilla Exporters Association |
| VAT | Value Added Tax |
| WFP | World Food Program |

# EXECUTIVE SUMMARY

## INTRODUCTION

This is the fourth annual progress report of the USAID-funded Agricultural Productivity Enhancement Program (USAID APEP) covering the period October 2006 through September 2007. USAID APEP aims to expand rural economic opportunities in the agricultural sector by increasing food and cash crop productivity and marketing. USAID APEP uses a commodity and intervention selection system to identify market-driven opportunities and allocate resources; and to guide its selection of commodity focus and interventions. During its fourth year, USAID APEP focused on the following commodities: cotton, coffee, upland rice, sunflower, barley, flowers, vanilla and bananas (matooke).

## OVERVIEW OF CLIMATIC CONDITIONS AND PRICES

The onset of steady rains for 2006B season was delayed as dry conditions or suppressed rains persisted during September 2006 and early October 2006 over wide areas of the country. The rains became more pronounced in parts of eastern and central regions, where heavy rains reaching flood levels were experienced in some places. The cessation of 2006B season which continued to late January and early February 2007 assisted crop development, leading to above average production for most crops apart from the cotton growing areas which continued to receive heavy rains when the normal cotton crop season should have ended. About 30% of the total cotton production in 2006/07 was estimated to have been lost. On a positive note crops such as bananas, coffee, vanilla and rice benefited in terms of yield enhancement but some post-harvest problems were encountered particularly at the time of drying.

2007A season started later than usual with poor distribution of rainfall in most areas resulting in lower than normal precipitation in the months of February and March 2007. Rainfall intensity increased steadily into the second season with little or no inter-season dry period. This hampered harvests and resulted in crop losses in the root crops as well as post-harvest losses in the grain crops. High moisture conditions slowed field off take, with intensified rainfall during August and September 2007. Such rainfall which was well in excess of soil infiltration rate created high levels of run-off and areas with poor drainage suffered most. Harvest losses were quite high in these areas, although the rainfall excess caused minor crop losses throughout the country especially where farmers had been tempted to encroach on wetland margins.

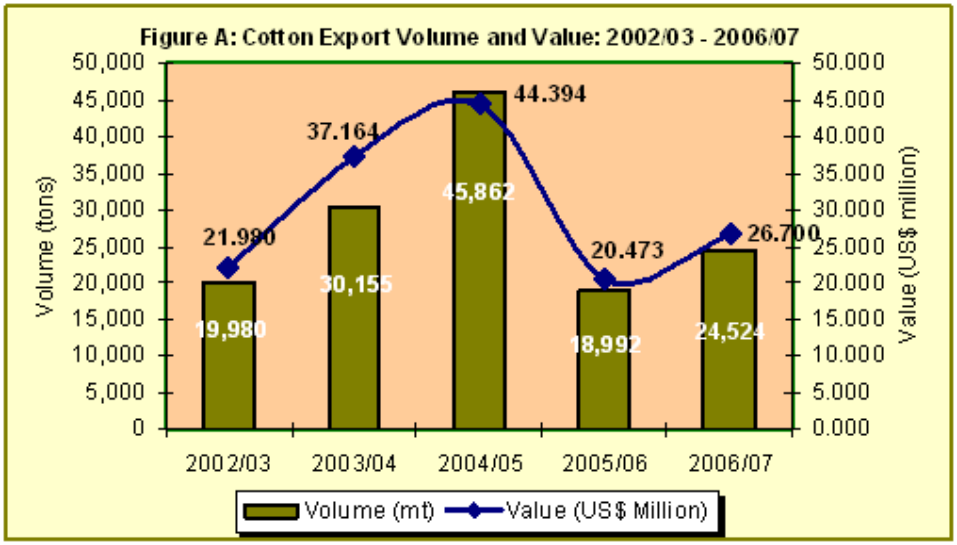
Throughout the reporting period commodity prices remained relatively high, with farm gate prices of USh3,000-5,000 per bunch of matooke; USh130-240 per kg of maize grain; USh400-500 per kg of rice paddy; and USh800-1,150 per kg of sesame. Cotton prices had firmed slightly on the international market resulting in farm gate prices of USh450-500 in most cotton growing areas. Prices for both Robusta and Arabica coffee also remained high during the reporting period, with Kiboko (dry cherries of Robusta) prices ranging from USh900-1,200 per kg and hulled coffee (FAQ) between USh2,000-2,300 per kg. Arabica parchment prices in the Mt. Elgon region ranged from USh2,300-2,800 per kg.

## USAID APEP COMMODITY PERFORMANCE

**Cotton**: USAID APEP continued to work with the designated lead ginners in the 8 production zones throughout the reporting period. In the USAID APEP model, farmers' adoption of the cotton production technologies has been driven by participation of farmers in trainings, field days and hands–on exercises. During the period under review, 2,900 demonstration sites

were established, bringing the cumulative number of demonstration sites established with support from USAID APEP over life of project to 20,429 demonstration sites. Significant effort was placed on encouraging the interest in working with organic cotton development. USAID APEP TA assisted in the formation of a new association called the Northern Uganda Organic Producers and Processors Association (NUOPPA).

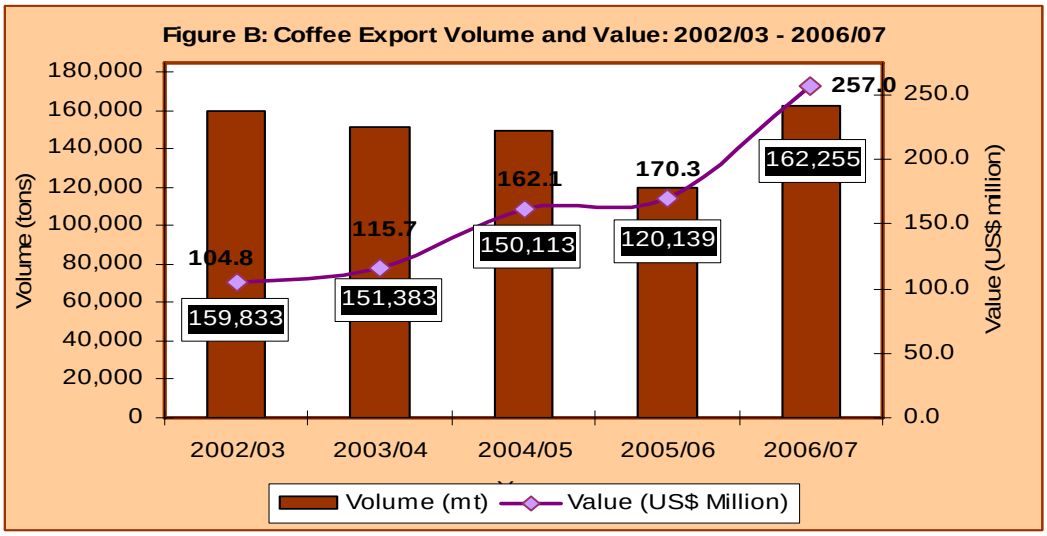
As a result of the heavy end of 2006/07 season rainfall, the industry performance was a modest 132,564 bales of lint with an export value of $26.7 million (as at 07/10/2007 ACE Report) compared to an earlier industry projection of 180,000–200,000 bales. This represented 133% of what was achieved the previous year (99,360 bales of lint in 2005/06) and is significantly lower than 2003/04 and 2004/05 export levels (Figure A). At the farm gate level, the late declaration of the cotton farm gate prices put farmers in a very uncompromising position leading to loss of revenue due to low prices illegally declared by buying agents. In some instances farmers' seed cotton was bought at as low as USh350 per kg by agents who took advantage of the situation before the declaration of the indicative price of USh450 per Kg.




Production of cotton has remained problematic in Uganda due to price, biotic and abiotic stress factors. Low capacity utilization in the ginning sector has bid up the price of seed cotton (with short-run benefits to farmers), and it has encouraged poaching of seed cotton resulting in a collapse of the zoning system. This, combined with low ginner margins, has eroded incentives to provide extension services, crop inputs and PO strengthening to farmers (who will then suffer in the long-run). Without a good production or price season, conventional cotton will stagnate. There are good prospects for organic cotton, but only if there can be an effective package developed so yields can be enhanced.

**Coffee:** During the reporting period (October 2006-September 2007) Uganda's coffee exports totalled 2.7 million 60-kg bags, equivalent to 162,255 mt valued at $257 million. This represents an overall increase of 36% and 51% in volume and value respectively over 2005/06 as shown in Figure B. The improved performance in volume is attributed to the favourable weather conditions, coupled with high world market prices hence good farm gate prices and increased level of adoption of good agricultural and management practices by some coffee farmers. There is also supply response from the surviving trees of the GOU coffee replanting program. An analysis of the coffee export performance over the past five coffee seasons is shown in Figure B. It may be observed that the 2006/07 coffee export

value is way over that achieved over the past five years. Indeed since the 1998/99 coffee season, Uganda's coffee export value had not exceeded US$200 million in any single year.




USAID APEP focused its activities and resources during the reporting period on training farmers on quality improvement and improved agronomic practices through demonstration fields, farmer-enterprise linkages and bulking for the market as well as a replanting program as a short-term solution to replace the old and wilt affected coffee trees. USAID APEP TA worked closely with UCDA, COREC, district agricultural sub-county extension staff and extension staff from the private exporters as well as the PO and DC leadership and agro-input suppliers through the use of the coffee field demonstrations established for coffee-related trainings. Through this collaboration for example, input suppliers were able to introduce hitherto unavailable on the local markets, smaller quantities of inorganic fertilizers including 5kg or 10kg or 50kg packs affordable to farmers' and suitable for promotion of adoption on an incremental basis. According to field day records, a total of 47,138 farmers that included 9,789 females benefited from both the newly established and existing demonstration sites.

**Sunflower:** USAID APEP continued to collaborate with A.K. Oils & Fats (U) Ltd in Masindi, Lira, Apac and Oyam (formally part of Apac) districts. The 31,291 farmers under this scheme planted approximately 71,160 acres from the 142,320 kg of seed of PAN 7351 hybrid sunflower that was sold in the OGS during the 2006B and 2007A seasons. During the work plan year 19,100 mt of sunflower grains were procured by A.K. Oils & Fats (U) Ltd for the 2006B season and 8,600 mt sunflower grain was procured for the 2007A season crop (harvest not complete at the time of reporting) resulting in a farm gate income of US$5.03 million for the reporting year. A.K. Oils & Fats (U) Ltd has constructed a new oil mill in Lira with a daily crushing capacity of 80mt, with an investment of approximately $1.4 million effectively doubling the company's processing capacity. There was also a continued collaboration with Sanyu Agro Industries Ltd, a relatively new company in the oil milling industry. The company operates in Nebbi district, where an outgrower scheme of about 3,083 collaborating farmers has been developed.

A total of 34,374 (31,291 with A.K. Oils & Fats (U) Ltd and 3,083 with Sanyu Agro Industries Ltd) collaborating farmers have been registered in the out-grower schemes (OGS) to-date. Of these 14,307 are women (13,358 under A.K. Oils & Fats and 1,212 under Sanyu Agro Industries).

**Sesame:** USAID APEP continued collaboration with four (4) sesame trading companies namely; Olam (U) Ltd and CARE Uganda/Nile Pro Consult Ltd/UNO Trading Co. Ltd in West

Nile region (Nebbi, Arua and Yumbe districts); and Outspan Enterprises Ltd (Northern Uganda Eco Organic Ltd) and Lango Organic Farming Promotion/Shares! (U) Ltd in the Lango/Teso region (Kaberamaido, Apac, Oyam and Lira districts) during the 2006B season. Conventional and organic sesame production was promoted in West Nile and Lango/Teso sub-regions respectively. During the 2007A season, Olam (U) Ltd and Outspan Enterprises Ltd continued to provide a full range of support services to the collaborating farmers registered in their respective OGSs using the USAID APEP extension model. Further efforts were targeted at the establishment and/or strengthening of these out-grower schemes.

The collaborating farmers registered in the OGSs were introduced to improved production and post-harvest handling practices through 836 technology transfer sites established in the West Nile and Lango/Teso sub-regions during the period. A total of 13,012 farmers were exposed to improved production practices through the low external input technology transfer sites.

**Upland Rice:** A cumulative total of 3,111 demonstration sites (each between ½-1 acre) have been established with a cumulative total 44,408 farmers being trained in upland rice production by end of September 2007. In order to address the constraints related to farm labour, USAID APEP has, through the private sector introduced labour saving equipment and chemicals to reduce the drudgery. Rice planters, herbicides for weeding, threshers for harvesting and pest control methods have been introduced amongst the rice producers. The product to reduce bird pressure (Bird Shield®) is still under test by Balton as the main agent.

With the improved security situation, USAID APEP focused on upland rice promotion in Northern Uganda. USAID APEP through its SAF support to SOMED, the OVP and CARITAS provided TA in training and market linkages to upland rice growing in Gulu concentrating on production around 5 decongested camps. Rice production at the Kyaka refugee camp in Kyenjojo has become the major economic activity for 2,000 farming families resident in the camp. USAID APEP continued to work with various partners (JICA, NAADS, A2N SG 2000 UNDP, Office Of The Vice President, SOS–Gulu program, ICR, Caritas SOMED, Centenary Bank, CMF, PMA, AAH, OPM, UNHCR, CBOs, rice processing companies, traders and farmers through its demonstration and technical assistance program to achieve the goal of reducing rice imports by 40% and increasing quantity and quality of Ugandan rice in the next five years.

**Maize:** During the reporting period, USAID APEP provided limited TA to commercial maize farmers in the main growing areas of Kapchorwa, Mubende, Bugiri, Iganga, Kamuli and Kiboga districts. The commercial maize farmers in these areas received technical training in institutional development, crop husbandry and post-harvest handling, marketing as well as linkages to input suppliers, buyers and financial service providers through the Producer Organization Trainers (POTs). Of note is the excellent work being carried out in Bugiri, totally independent of any external support. Since USAID APEP has withdrawn its active field training, demonstration and market linkage support, the PO-DC system has had to provide all the internal services required to maintain the production to market system for maize. During this reporting year, the DCs independently marketed a total of 5,345 mt of maize grains and procured 67 mt of seed through the POs.

According to the Regional Agricultural Trade Intelligence Network (RATIN) database, about 92,200 mt of maize grains were traded across the borders with Kenya and Rwanda. At an average price of US$165 per mt, Uganda earned about US$15.21 million through the cross border trade in maize grains. With WFP procurements of 37,000 mt, Uganda's maize exports during the reporting period reached approximately 130,000 mt, valued at US$21.45 million.

**Barley:** The reporting period witnessed on-going collaboration between Uganda Breweries Limited (UBL)/East African Maltings Limited (EAML) and USAID APEP through the SAF

program for the production of barley in Kapchorwa and Bukwo districts. A total of 3,100 and 1,000 farmers were registered in the out-grower schemes in Kapchorwa and Bukwo districts, respectively. About 187,000 kg (Karne and Sabini varieties) of imported seed was sold on credit to collaborating farmers during the season. A total of 1,050 mt of grain was procured realizing a value of USh420 million.

There continues to be strong growth in demand for the local Senator brand of beer produced with barley. It has exceeded the demand for local sorghum Eagle brand beer produced by the competitor, Nile Breweries.

**Vanilla:** Financial and technical assistance by USAID APEP has been extended to the industry through VANEX resulting in a tremendous growth both in terms of coverage/outreach and export volumes although export value has not increased due to slow recovery of the international market prices. During the reporting period, a 4-day residential refreshers' training-of-trainers course was conducted for 72 VANEX staff and 10 NAADS coordinators. In collaboration with USAID-funded PSI project, participants were sensitized on issues related to HIV/AIDS. Furthermore, a series of training events were conducted leading to an exposure of 9,285 vanilla growers to improved production practices through the 60 existing demonstration sites and farmer outreach extension programs. Emphasis was put on training farmers in improved field management practices such as shade management, mulching, proper looping, pollination, harvesting and quality control.

Export records indicated a total of 277 tons of cured vanilla were exported, of which 79 tons were air shipped while 198 tons were by less expensive sea freight. International prices for cured vanilla remained low at US$12-25 per kg. It is estimated that vanilla exports realized about US$4.87 million during the reporting period.

**Banana (Matooke**): During the reporting period, USAID APEP continued with the provision of financial and technical assistance to banana farmers through 215 demonstration sites in 9 districts. Through these sites and farmer training, 8,360 farmers were exposed to improved banana production and maintenance practices, with about 58% being females. The prolonged rains in most places coupled with good management practices that incorporated use of inputs such as clean tissue culture propagated materials, fertilizers, mulch and crop protection enhanced banana productivity and production. Returns from well managed demo sites indicated average bunch weights of 30 kg with extremes of 40–60kg from some parts of Bushenyi and Manafa/Mbale. Farm gate prices ranged between USh3,000 and 10,000 per bunch, depending the region and size of the bunch. Several farmers under the establishment program sold out suckers to collaborating farmers at a price range of USh300 to 1,000 per sucker. With persistence of the BBW outbreak, coupled with banana weevil and nematode infestation, availability of clean planting materials remains a big challenge.

Through a USAID APEP SAF, INIBAP/Bioversity was funded to carry out trials on understanding Banana *Xanthomonas* wilt control options and post-infestation replanting interval using participating farmers' fields as research venues in Luweero and Mukono districts. With financial and technical support from USAID APEP, the International Institute of Tropical Agriculture (IITA) continued to carry out on-farm research focusing on increasing profitability of bananas through improved production techniques/practices and evaluation of 4 new matooke hybrids.

**Flowers:** With SAF support from USAID APEP, UFEA continued to support the industry through research, training and market promotion. USAID APEP TA together with UFEA continued to focus on the issue of quality assurance, standards and certification as laid down in the national and international codes of conduct for the cut-flower industry. Milieu Project Sierteelt (MPS) and European Retailer-Producer Good Agricultural Practices (EUREPGAP) inspections on flower farms continued. All flower farms except for 2 registered with MPS

ABC program. At the capacity building level, 18 mid-level supervisors completed training under the Applied Tropical Floriculture (ATF) program.

The prolonged overcast weather caused reduction in the plant growth and also high incidences of downy mildew causing a significant reduction in export volumes. Export volumes of both roses and cuttings were 6,631 tons, with an estimated value of US$31.58 million. Cold chain management, however, still remains a challenge as the cold store space at FHL needs expansion. Furthermore, south bound freight to reduce costs of freighters remains an issue. Also high costs of fuel and power continue to make Uganda less attractive to flower investment.

## AGRICULTURAL SUPPORT SERVICES

**Agricultural Finance:** The USAID APEP technology transfer program creates adopters with effective demand for off-farm inputs and thus the inevitable need for additional finance. However, the USAID APEP strategy requires that a comprehensive understanding of "profit after interest" by the farmer is a precondition. The production loan outflow to USAID APEP clients in now over US$2.6 million per season through 21 commercial credit outlets country-wide, having started with only US$0.797 million through 6 outlets in 2004. Experience with the USAID APEP backed agricultural lending program shows that successful farmers usually borrow between 30% and 60% of the total requirement based on costs of production analysis. This helps reduce over-financing, and risks of diverting funds to other uses.

Despite the successes in agricultural finance, there are a number of challenges which include: climate risk management; banks shying away after "bad experiences"; commodity price risks; banks reluctance to operate independent of donor-supported programs to sustainability generate a clientele base and meet their capacity building needs.

**Agricultural Inputs:** The USAID APEP approach to input supply has been to allow the private sector take a lead in the agro-inputs business. USAID APEP has provided technical, financial linkage and advisory support which has helped create linkages between the suppliers and users of various categories of agro-inputs. Through its training of over 500 rural stockists and DC managers, USAID APEP has helped create an environment whereby farmers can access genuine inputs at a reasonable price. Farmers in particular have been encouraged, through their POs, to bulk-purchase inputs so as to take advantage of economies of scale. USAID APEP has focused its training on business and credit management, product knowledge and safe use and customer care and development. USAID APEP has been able to involve some of its Depot Committees (DC's) as agri-input business entities in order to service farmers adopting the demonstrated technologies into their production systems in the different areas of operation.

In order to increase the input outreach, Uganda National Agro-Input Dealers Association (UNADA) was formed to bind all agro-input dealers in the country and to streamline their operations. Through training and credit schemes, UNADA is being strengthened and expanding gradually to all parts of the country. At present there are 700 UNADA members of which some are DCs formed under USAID APEP.

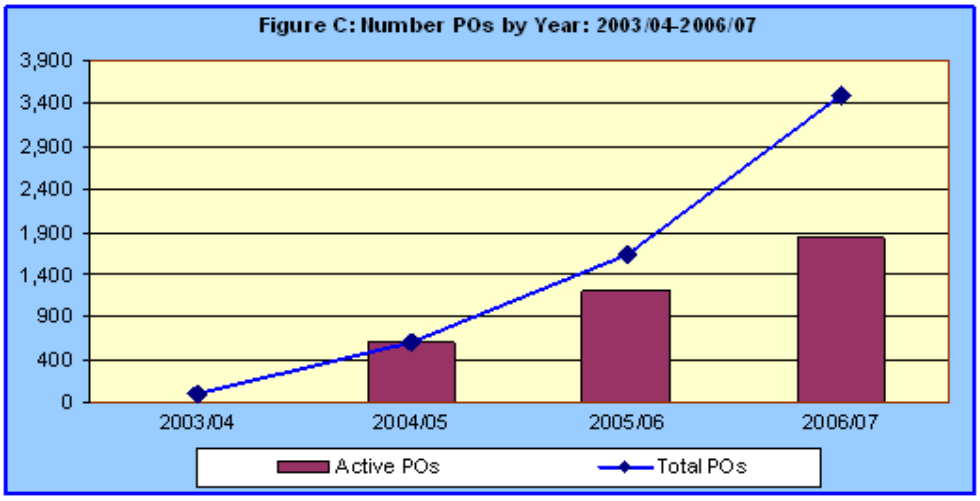
**Agricultural Research, Education and Training (REE):** Staff and students of Makerere University as well as those of other institutions from NARO, MAAIF and Agricultural Extension service providers have received support from USAID APEP sponsorship for their MSc and PhD study, exposure to the US universities whereby new innovations and knowledge have been disseminated to better serve the commercially oriented agricultural sector. The program has to-date supported a total of 7 MSc students and 4 PhDs in the different agricultural disciplines both at Makerere and in the US as a sandwich program.

In order to match the job market demands with the quality of graduates able to practically utilize their professional and entrepreneur skills and knowledge in real life situations, with the ability to create jobs and compete favorably in both the private and public employment sectors, USAID APEP in collaboration with Makerere University Faculty of Agriculture has promoted the placement of students in agricultural related companies and institutions for practical hands-on experience so as to ensure a more competent work force in the future with the ability to meet the job market demands. To-date 235 students have been placed with various private and public firms/institutions through the USAID APEP internship program. The demand by the companies for students to be placed at their premises is rising though there is a mixed response by the companies regarding the costs related to the wellbeing of the interns.

## PRODUCER ORGANIZATION STRENGTHENING

Over the life of project 3,504 POs have been formed of which 1,823 are fairly strong (Figure C) as indicated by their commitment to engage in bulk marketing, bulk input procurement, member education through the demonstration program, keeping business records, internal saving, and sending such information to USAID APEP on a regular basis. Of the 3,504 POs, 1,280 have been established by the corporate partners through their field staff.

Thus, the 1,681 POs that are not yet engaged in all the vital activities need to be strengthened and nurtured to become strong business oriented organizations that are able to do business with serious commodity buyers and agro input suppliers as well as establishing lasting partnerships with technical assistance providers on their own. This is important since the commercialization of POs and their DCs is a critical means towards the development and strengthening of successful outgrower schemes as well as building sustainable business oriented farmer-based organizations.




## PROGRESS TOWARDS LOP PMP INDICATORS

Progress towards meeting LOP PMP indicator targets is provided in the table below. From the table, it may be observed that for most of the PMP indicators, the project has made tremendous progress to-date towards achieving the set targets, with over 90% of LOP targets being achieved.

**USAID APEP PMP INDICATOR ACHIEVEMENTS: 2003/04 - 2006/07**

| Indicator | Unit of measure | Baseline Value | LOP target | 2003/04 | 2004/05 | 2005/06 | 2006/07 | 2006/07 as % of LOP Target |
|---|---|---|---|---|---|---|---|---|
| Average h/h income of APEP-supported producers (from APEP-supported commodities) | US$ p.a. | **185.45** | **260.00** | **197.49** | **216.70** | **253.70** | **281.37** | 108% |
| % change (over baseline) in h/h income of APEP-supported producers | % | 0 | 40% | 6% | 17% | 37% | 52% | -- |
| # of h/h supported by APEP | No | 0 | 250,000 | 165,000 | 204,603 | 269,494 | 288,954 | 116% |
| # of h/h with disability supported by APEP | No | 0 | 5,000 | 0 | 1,358 | 2,471 | 4,779 | 96% |
| # of on- & off-farm jobs created | No | 0 | 80,000 | 13,347 | 30,219 | 67,901 | 80,214 | 100% |
| # of on- & off-farm enterprises created | No | 0 | 600 | 311 | 495 | 771 | 834 | 139% |
| Total production of APEP-supported crops | | | | | | | | |
| - coffee | mt | 160,000 | 200,000 | 151,383 | 150,113 | 120,139 | 162,255 | 81% |
| - cotton | mt | 29,250 | 64,750 | 30,155 | 46,620 | 18,382 | 23,096 | 36% |
| - sunflower | mt | 10,000 | 40,000 | 10,600 | 16,000 | 25,700 | 28,100 | 70% |
| - rice | mt | 100,000 | 160,000 | 113,000 | 147,000 | 173,000 | 168,000 | 105% |
| - maize | mt | 315,000 | 750,000 | 550,000 | 620,000 | 580,000 | 645,000 | 86% |
| - flowers | mt | 4,424 | 7,000 | 6,284 | 7,286 | 7,596 | 6,631 | 95% |
| - banana | mt | 8,000,000 | 11,000,000 | 8,200,000 | 8,500,000 | 8,350,000 | 9,200,000 | 84% |
| - cured vanilla beans | mt | 135 | 185 | 138 | 75 | 229 | 277 | 150% |
| Yields of APEP-supported crops (obtained from adopters) | | | | | | | | |
| - coffee | mt/acre | 0.290 | 0.500 | 0.350 | 0.600 | 0.450 | 0.800 | 160% |
| - cotton | mt/acre | 0.200 | 0.600 | 0.460 | 0.525 | 0.250 | 0.350 | 58% |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| - sunflower | mt/acre | 0.300 | 0.800 | 0.600 | 0.650 | 0.600 | 0.600 | 75% |
| - rice | mt/acre | 0.600 | 1.500 | 0.720 | 1.200 | 1.500 | 1.500 | 100% |
| - maize | mt/acre | 0.550 | 2.000 | 1.500 | 1.500 | 1.600 | 1.750 | 88% |
| - flowers | mt/acre | 11.000 | 15.000 | 12.000 | 12.500 | 13.250 | 13.400 | 89% |
| - banana | mt/acre | 5.850 | 10.000 | 7.260 | 12.000 | 11.760 | 12.000 | 120% |
| - green vanilla beans | mt/acre | 0.250 | 0.400 | 0.250 | 0.300 | 0.350 | 0.375 | 94% |
| Unit cost of production of APEP-supported crops | | | | | | | | |
| - coffee | US$/kg | 0.270 | 0.180 | 0.245 | 0.206 | 0.229 | 0.204 | 88% |
| - cotton | US$/kg | 0.310 | 0.200 | 0.290 | 0.237 | 0.260 | 0.220 | 91% |
| - sunflower | US$/kg | 0.250 | 0.140 | 0.156 | 0.141 | 0.121 | 0.168 | 83% |
| - rice | US$/kg | 0.400 | 0.200 | 0.238 | 0.209 | 0.187 | 0.184 | 109% |
| - maize | US$/kg | 0.080 | 0.060 | 0.072 | 0.065 | 0.066 | 0.069 | 87% |
| - flowers | US$/kg | n.a | n.a | n.a | n.a | n.a | n.a | n.a |
| - banana | US$/kg | 0.030 | 0.020 | 0.027 | 0.022 | 0.013 | 0.017 | 118% |
| - green vanilla beans | US$/kg | 0.700 | 0.550 | 0.633 | 0.626 | 0.650 | 0.625 | 88% |
| Value of targeted commodities marketed by APEP clients | US$ | 106,000,000 | 150,000,000 | 112,448,014 | 122,277,184 | 152,910,800 | 171,281,140 | 114% |
| % change in value of targeted commodities marketed by APEP clients over baseline | % | 0 | 40% | 6% | 15% | 44% | 62% | -- |
| Volume of targeted commodities marketed by APEP clients | mt | 615,000 | 800,000 | 662,972 | 681,411 | 692,014 | 809,704 | 101% |
| % change in volume of targeted commodities marketed by APEP clients | % | 0 | 30% | 8% | 11% | 13% | 32% | -- |
| Gross revenue of off-farm enterprises supported by APEP | US$ | 140,000,000 | 225,000,000 | 151,482,439 | 166,340,898 | 212,201,880 | 247,509,250 | 110% |
| % change (over baseline) in | % | 0 | 60% | 8% | 19% | 52% | 77% | -- |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| gross revenue of off-farm enterprises supported by APEP | | | | | | | | |
| No of input suppliers serving APEP clients | No | 0 | 400 | 177 | 281 | 472 | 497 | 124% |
| No of local credit service points reaching APEP clients | No | 0 | 30 | 8 | 24 | 28 | 33 | 110% |
| Amount of credit provided to APEP-supported clients | US$ | 612,000 | 900,000 | 830,867 | 1,404,485 | 1,953,685 | 2,594,949 | 288% |
| % change in amount of credit provided to APEP clients | % | | 45% | 36% | 129% | 219% | 324% | -- |
| No of APEP-supported firms exporting agricultural products | No | 0 | 100 | 19 | 68 | 74 | 76 | 76% |
| No of agricultural processors supported by APEP | No | 0 | 50 | 20 | 52 | 60 | 61 | 122% |
| Output value of APEP-supported processors | US$ | 65,331,921 | 130,000,000 | 65,331,921 | 87,984,372 | 146,221,505 | 156,350,215 | 120% |
| % change in output value of APEP-supported processors | % | | 100% | 0% | 35% | 124% | 139% | -- |
| No of APEP-supported firms managing outgrower schemes | No | 0 | 25 | 7 | 12 | 12 | 14 | 56% |
| No of farmers involved in APEP-supported outgrower schemes | No | 0 | 125,000 | 12,402 | 29,287 | 51,331 | 147,495 | 118% |
| No of public/private partners developed by APEP | No | 0 | 125 | 29 | 32 | 40 | 83 | 66% |
| Amount of private sector resources leveraged through partnerships | US$ | 0 | 6,000,000 | 1,442,203 | 3,171,332 | 11,580,464 | 12,677,242 | 211% |
| No of Depot committees (DCs) strengthened* | No | 0 | 200 | 30 | 89 | 180 | 212 | 106% |
| No of producer organizations (POs) strengthened by APEP | No | 0 | 200 | 290 | 763 | 1,631 | 3,504 | 1752% |
| Average group membership per PO | No | 20 | 40 | 22 | 25 | 27 | 25 | 63% |
| % change in group membership of APEP-supported producer | % | 0 | 100% | 10% | 25% | 35% | 25% | -- |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| organizations | | | | | | | | |
| No of APEP-supported producers using improved technologies/practices | No | 0 | 150,000 | 81,215 | 105,239 | 170,660 | 189,556 | 126% |
| Area cultivated using improved technologies | acres | 0 | 150,000 | 74,078 | 99,880 | 142,363 | 155,279 | 104% |
| No of key policy/institutional constraints alleviated through APEP intervention | No | 0 | 10 | 0 | 2 | 3 | 3 | 30% |
| No of key policy constraints that have been addressed through APEP intervention | No | 0 | 15 | 2 | 5 | 7 | 7 | 47% |
| No of individuals trained by APEP in disciplines related to private sector agric | No | 0 | 365,000 | 168,107 | 215,864 | 261,881 | 321,713 | 88% |
| No of individuals completing internships with private sector firms through APEP support | No | 0 | 200 | 47 | 97 | 156 | 235 | 118% |
| No of biotech/biosafety regulations improved and in place | No | 0 | 3 | 0 | 1 | 2 | 2 | 67% |
| No of APEP-funded research contracts implemented by public sector bodies | No | 0 | 25 | 4 | 6 | 7 | 9 | 36% |

** The previous indicator about POs has been replaced with the concept of DCs (which is an aggregate of POs)*

# MAIN REPORT

# INTRODUCTION

This is the fourth annual progress report of the USAID-funded Agricultural Productivity Enhancement Program (USAID APEP). USAID APEP aims to expand rural economic opportunities in the agricultural sector by increasing food and cash crop productivity and marketing. USAID APEP builds on sector successes with added emphasis on creating economies of scale that catalyze transformation of agriculture from low input/low output, subsistence farming to commercially competitive agriculture. USAID APEP addresses targeted commodities and related systems; production-to-market transactions; improvements in input distribution; technology transfer; and producer organizations (POs); and development of competitive agricultural and rural enterprises. The project is consistent with the Government of Uganda's Poverty Eradication Action Plan (PEAP), Plan for Modernisation of Agriculture (PMA), and the Medium-Term Competitiveness Strategy (MTCS).

USAID APEP uses a commodity and intervention selection system to identify market-driven opportunities and allocate resources; and to guide its selection of commodity focus and interventions. During its fourth year, USAID APEP focused on the following commodities: cotton, coffee, upland rice, sunflower, barley, flowers, vanilla and bananas (matooke) (Annex A).

During the period under review USAID APEP continued to employ approaches to support agricultural competitiveness and commercialization. These included on the one hand, working with business and industry leaders to reach producers and on the other, working with producers to respond to market demands through PO and DC formation.

## A. Organizational Structure

The organizational structure of USAID APEP is shown in Exhibit I. The project is headed by a Managing Director (MD) who is also the chief-of-party. A monitoring and evaluation specialist works directly with the MD to implement the project performance monitoring plan (PMP). The technical core of the project comprises four units: the Commodity Commercialization Unit, the Business Expansion Unit, the Program Services Unit, and a cross-cutting Technical Support Unit:

- The **Commodity Commercialization Unit** team chooses commodities and interventions in consultation with the rest of the team, it oversees the "national business and marketing development strategies" of the "national business" commodities, and works directly with the private sector as well as public sector and donor representatives in planning. The unit staff is divided across two portfolios. Portfolio A includes cotton, and grains & oilseeds; while Portfolio B includes coffee, flowers, vanilla and banana (matooke).

- The **Business Expansion Unit** offers supporting, specialized technical assistance services and coordination to the Commodity Commercialization Unit in PO management and commercialization.

- The **Program Services Unit** houses the Strategic Activities Fund (SAF) management and project administrative services.

- A cross-cutting **Technical Support Unit** covers biotechnology and biosafety, agribusiness finance, agricultural input supply and agricultural commercialization-focused research, education, and training.

The Chemonics Home Office (HO) provides contract management and support services through a Program Management Unit (PMU) that liaises directly with the MD.

## B. Results Framework

The USAID APEP Results Framework (RF), developed jointly between the USAID APEP design team and USAID/Uganda, is presented in Exhibit II. This RF encapsulates the implementation approach of USAID APEP and is used to guide the project work planning and results monitoring.

At the highest level of the project RF is SO 7—Expanded Sustainable Economic Opportunities for Rural Sector Growth. This is the project goal. While USAID APEP is expected to contribute significantly to this goal, it does this through the project's sub-objective—increased commercialization of targeted commodities. To achieve the project sub-objective that will lead to the achievement of SO 7, USAID APEP works through three project intermediate results (PIRs). These are:

- Increased enterprise efficiencies
- Increased on-farm productivity
- Improved enabling environment.

These PIRs are further supported by sub-PIRs as shown in the RF. In this annual report, we address each sub-PIR as an objective, together with relevant life of project (LOP) targets. In the following section, we present details of the progress report for FY07 organized by PIR and objectives. Each objective has a number of benchmarks, established under the annual work plan. Under each objective, we present the LOP targets and the program strategy, and for each benchmark there is a narrative of activities undertaken, challenges and results achieved during the reporting period. The period under review for this annual progress report is October 1, 2006 through September 30, 2007.

**Exhibit I: APEP Organizational Structure**

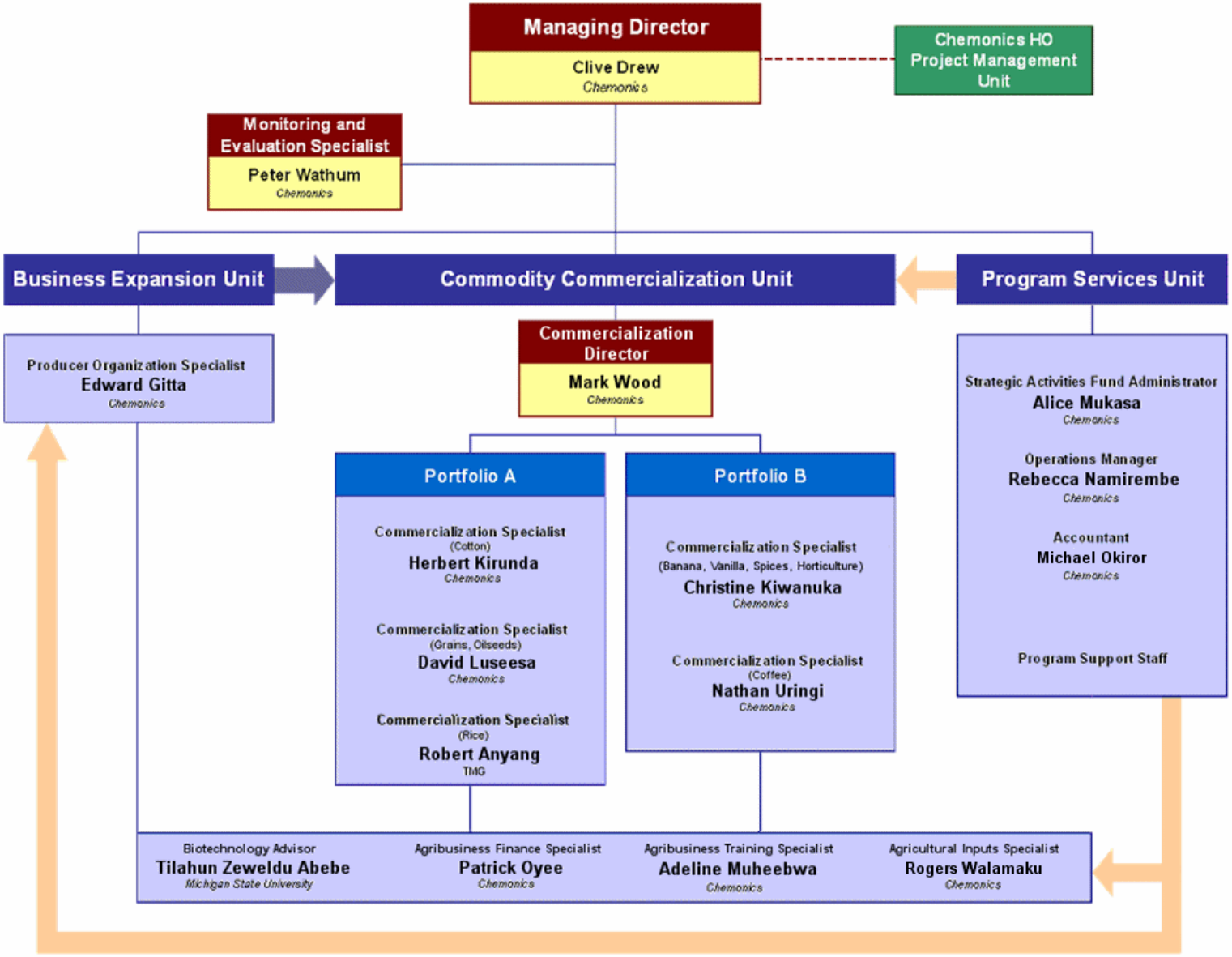
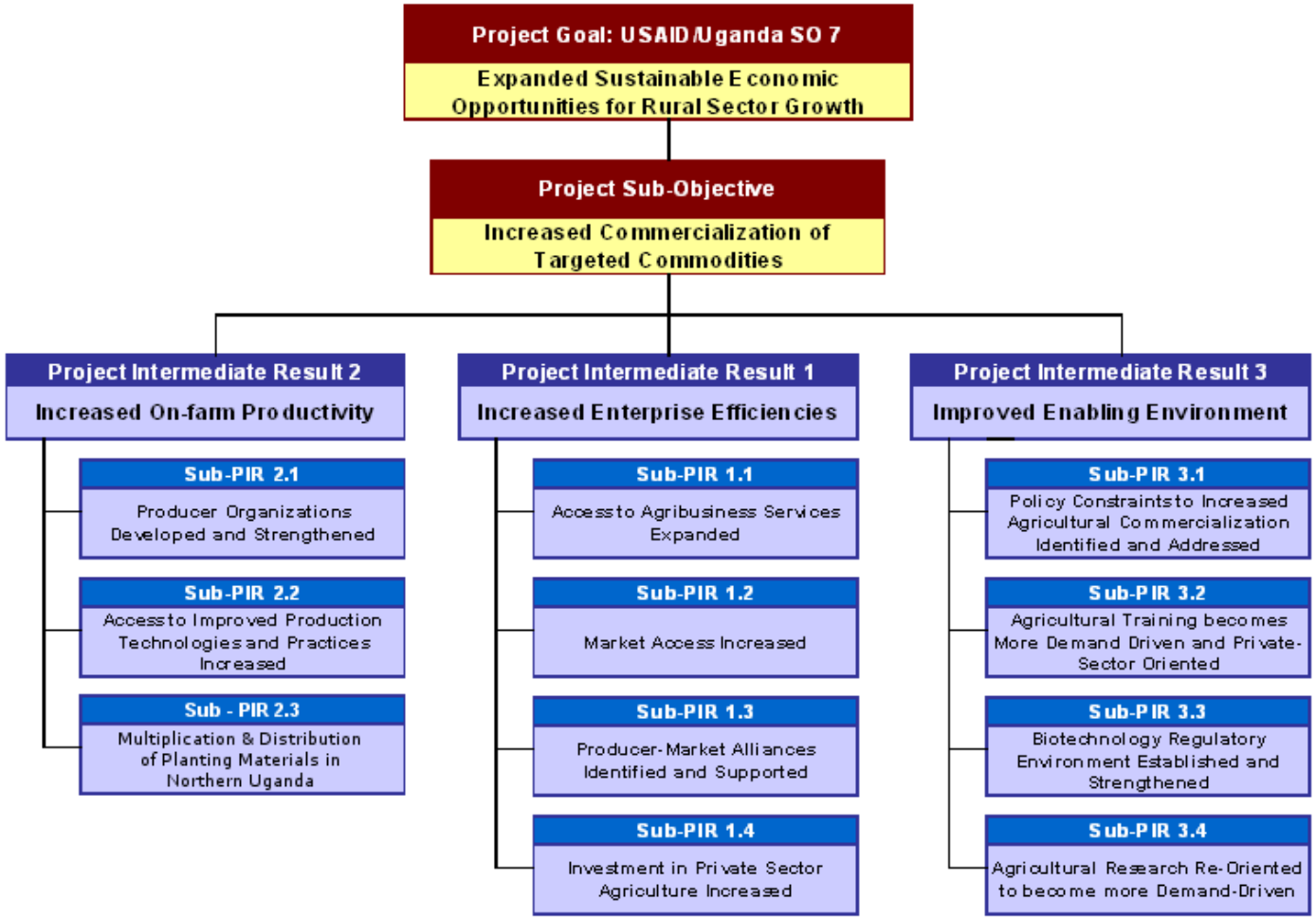


**Exhibit II: APEP Results Framework**



## C. Overview of the Climatic Conditions and Commodity Prices

The onset of steady rains for 2006B season was delayed as dry conditions or suppressed rains persisted during September 2006 and early October 2006 over wide areas of the country. Occasional heavy rains causing destruction to lives, property and infrastructure were experienced over several places in the country in November 2006. Worst affected areas included Masindi, Nebbi, Wakiso and Kampala districts. Enhanced rainfall continued in the months of November and December 2006 as moderate El Niño conditions continued. The rains became more pronounced in parts of eastern and central regions, where heavy rains reaching flood levels were experienced in some places.

The cessation of the season which continued in this undulated manner to late January and early February 2007 assisted crop development, leading to above average production for most crops apart from the cotton growing areas which continued to receive heavy rains when the normal cotton crop season should have ended. Cotton farmers were faced with a major challenge during harvesting. Significant losses in production were recorded due to boll rots as a result of development of fungal disease; loss of squares and bolls due heavy rains; lack of adequate storage facilities; and promotion of vegetative growth with inhibited boll setting. About 30% of the total cotton production in 2006/07 was estimated to have been lost. On a positive note, crops such as bananas, coffee, vanilla and rice benefited in terms of yield enhancement but some post-harvest problems were encountered particularly at the time of drying.

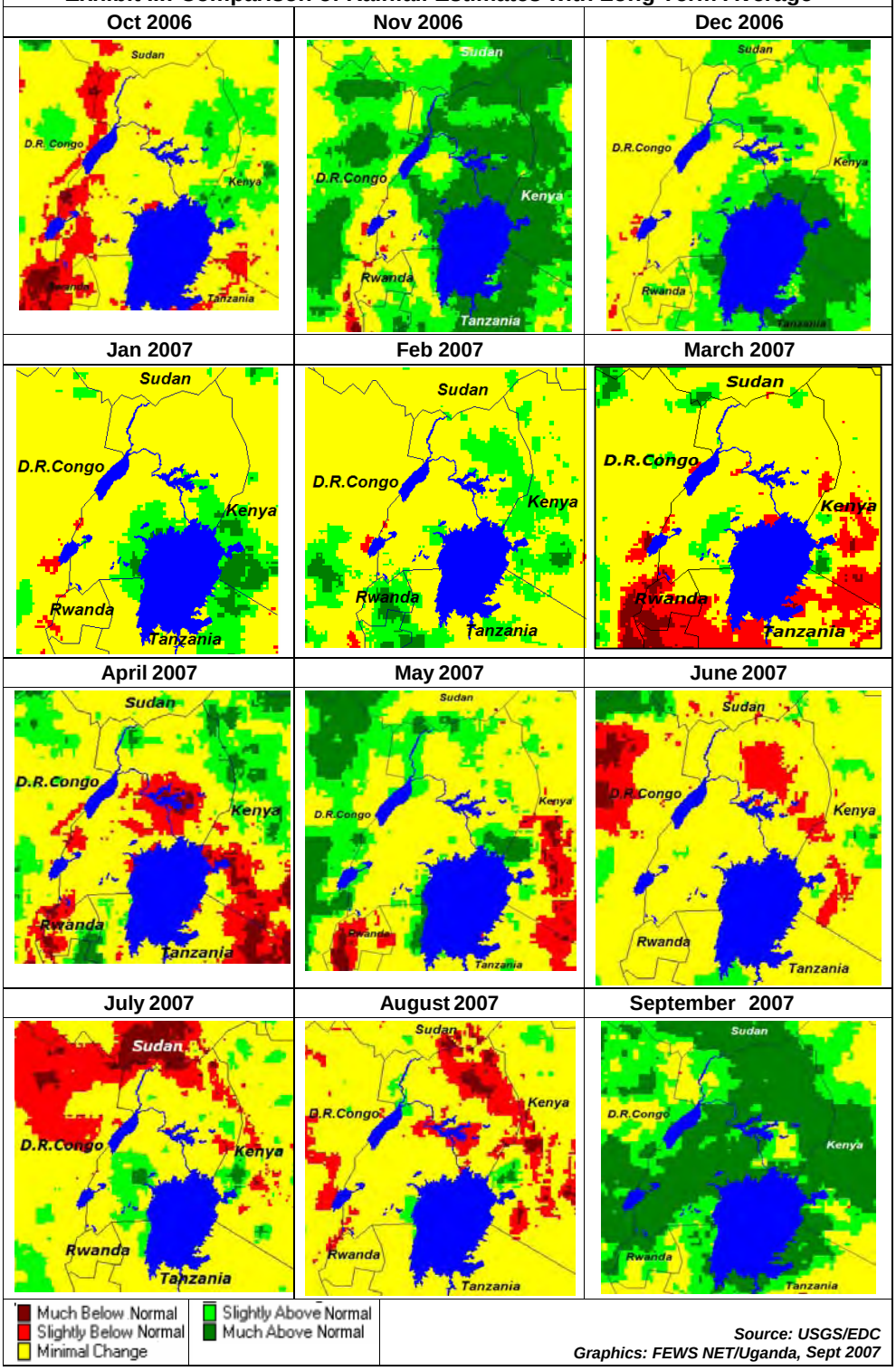
2007A season started later than usual with poor distribution of rainfall in most areas resulting in lower than normal precipitation in the months of February and March 2007. This was the result of influence by a warm episode (El Niño) condition which developed in the tropical Pacific Ocean. Rainfall intensity increased steadily into the second season with little or no inter-season dry period. This hampered harvests and resulted in crop losses in the root crops as well as post-harvest losses in the grain crops. High moisture conditions slowed field off take.

The rainfall intensified during August and September 2007 (not highlighted very well in the graphics in Exhibit III because this measures NDVI, a vegetation index which is not immediately reflective following rainfall and does not realistically reflect excessive precipitation). Such rainfall which was well in excess of soil infiltration rate created high levels of run-off, and areas with poor drainage suffered.

The results were floods, of an intensity not seen in 30 years, in the Teso sub-region where drainage is slow and farm land is on waterlogged margins. Harvest losses were quite high in these areas, although the rainfall excess caused minor crop losses throughout the country especially where farmers had been tempted to encroach on wetland margins. It is estimated by independent sources that crop loss up to 75% can be expected in some seasonal crops. Teso ginners estimate that over half the 2007/08 cotton crop has been lost in the affected areas.

A comparison of rainfall estimates with long term average is shown in Exhibit III below.

**Exhibit III: Comparison of Rainfall Estimates with Long Term Average**




Throughout the reporting period commodity prices remained relatively high, with farm gate prices of USh3,000–5,000 per bunch of matooke; USh130-240 per kg of maize grain; USh400-500 per kg of rice paddy; and USh800-1,150 per kg of sesame. Cotton prices had firmed slightly on the international market resulting in farm gate prices of USh450-500 in most cotton growing areas. Prices for both Robusta and Arabica coffee also remained high

during the reporting period, with Kiboko (dry cherries of Robusta) prices ranging from USh 900-1,200 per kg and hulled coffee (FAQ) between USh2,000-2,300 per kg. Arabica parchment prices in the Mt. Elgon region ranged from USh2,300-2,800 per kg.

The national economy was characterized by increase in prices of most goods and services, resulting in an increase in rate of inflation. In particular, there was a steady increase in fuel prices resulting in increase in prices of manufactured consumer goods, notably sugar, beef and milled products. The Uganda Shilling appreciated from USh1,830 to the US$ in October 2006 to USh1,750 to the US$ in September 2007. Uganda continued to be plagued by electricity load shedding that disrupted agro-processing and added to the cost of production where stand-by generators were operated with expensive diesel fuel.

## D. APEP Commodity Overview

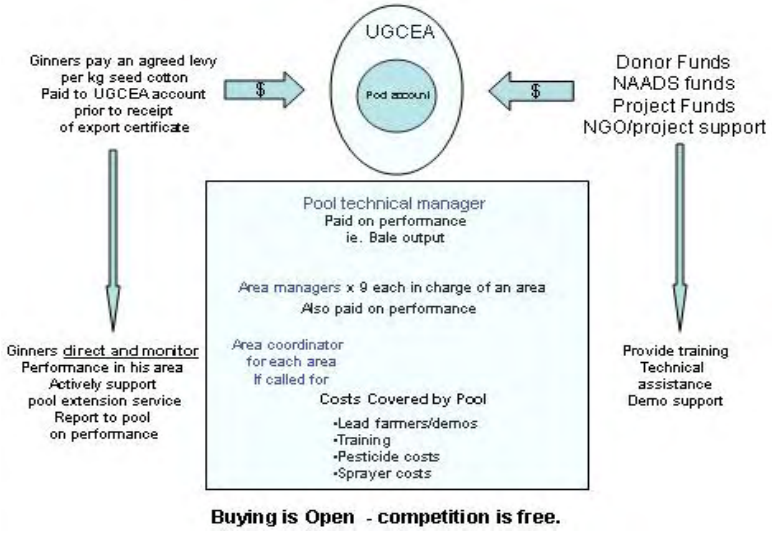
### Cotton

USAID APEP continued to work with the designated lead ginners in the 8 production zones throughout the reporting period. In the USAID APEP model, farmers' adoption of the cotton production technologies has been driven by participation of farmers in trainings, field days and hands–on exercises. During the period under review, 2,900 demonstration sites were established, bringing the cumulative number of demonstration sites established with support from USAID APEP over life of project to 20,429 demonstration plots.

Our partnership delivered a win–win situation for the ginners and farmers with ginners benefiting from increased supply of good quality cotton, more reliable supply of cotton, greater loyalty of farmers and greater operational efficiency. Participating farmers on the other hand benefited from increased production and profits, greater knowledge of the market, a guaranteed buyer and improved production techniques. However the poor season resulting from the El Niño event of 2006/07 resulted in poor harvest volumes. This prompted the ginners to question the justification of the zoning system as restrictions on procurement began to hurt their business. All ginners suffered equally. This gave rise to a series of protracted negotiations beginning January 2007 and only concluding in June 2007. The conclusion was to suspend the zoning system, but unfortunately nothing was instituted to take its place. That left the ginning industry in a total quandary – no collective action as far as pesticide purchase, ginners with little or no working capital and little enthusiasm or ability to take on additional debt.

USAID APEP TA made several attempts to secure an industry agreement by developing a private sector driven alternative to the zoning system. The option developed by USAID APEP is highlighted in the summary graphic (Exhibit IV) below.

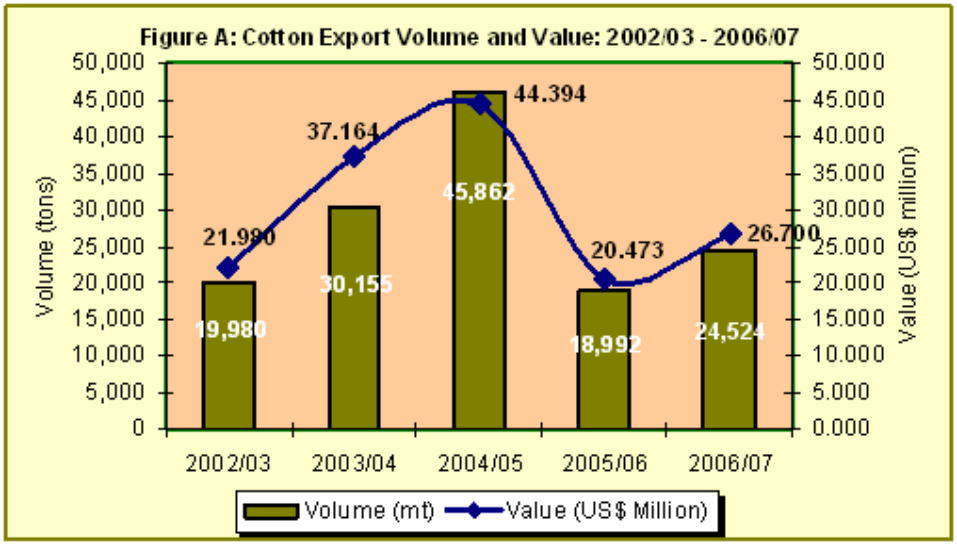
**Exhibit IV: USAID APEP Cotton Sub-sector Model**



These suggestions, although well supported did not produce a workable agreement because of the lack of trust between the parties and the inability to secure adequate safeguards. The Cotton Development Organisation (CDO) stated that it would take over pesticide procurement. At the time of reporting, however, only 137,000 one-acre packs of pesticide had been procured by this central system. Pesticide procurement and general support to extension, however, will remain issues for the industry unless some form of collective action is taken for the 2008/09 season. USAID APEP TA worked toward enhancing producer-corporate linkages, resulting in the development of POs in the cotton commodity portfolio with raised producer confidence. POs formed in the organic cotton area of Lango were used for certification. Additional group formation has taken place in Acholi in support of the Dunavant organic production system, where 38,000 farmers have had their first field inspection by an accredited certification firm. As a mandatory certification requirement, the 38,000 farmers were geo-referenced to pin point the exact location of their cotton gardens. USAID APEP supported this effort by procuring 10 GPS hand held devices as the most cost effective way to handle registration of such a large number of organic farmers in a timely manner.

In the 2006/07/08 seasons, USAID APEP attracted support of other donors and leveraged some of their resources to fund activities under the cotton demonstrations program. The Royal Netherlands Embassy (RNE) granted €161,898 for conventional cotton demonstration related activities in the Teso and West Nile sub-regions, and €26,018 for organic cotton demonstrations covering exclusively the areas of Lango sub-region. This total RNE support therefore, covered the districts of Arua, Nebbi, Yumbe, Adjumani and Moyo in the West Nile sub-region; Apac, Lira, Amolatar, Kaberamaido, Pader, Kitgum and Gulu in Northern Uganda; and Katakwi, Amuria, Soroti, Kumi and Bukedea in the Teso sub-region. Approximately USh150 million was provided by NAADS to support trainings, site coordinators allowances and input procurement (urea fertilizer) for ginners in Eastern, South Western and Mid western regions. It covered the districts of Tororo, Busia, Butaleja, Mbale, Pallisa, Iganga, Kamuli, Masindi, Hoima, Kasese, Bushenyi and Kamwenge.

As a result of the heavy end of 2006/07 season rainfall, the industry performance was a modest 132,564 bales of lint with an export value of $26.7 million. (as at 07/10/2007 ACE Report) compared to an earlier industry projection of 180,000–200,000 bales. This represented 126% of what was achieved the previous year (99,360 bales of lint) and is significantly lower than 2003/04 and 2004/05 export levels (Exhibit V). At the farm gate level, the late declaration of the cotton farm gate prices put farmers in a very uncompromising position leading to loss of revenue due to low prices illegally declared by buying agents. In some instances farmers' seed cotton was bought at as low as USh350 per kg by agents who took advantage of the situation before the declaration of the indicative price of USh450 per kg.



Significant effort during the 2007/08 cotton season has been placed on encouraging the interest in working with organic cotton development. During the 2006/07 season only BoWeevil and NUECO were involved in the production of organic cotton. However, global price trends and an increased demand for organic cotton stimulated the interest of a number or other companies. USAID APEP TA assisted in the formation of a new association called the Northern Uganda Organic Producers and Processors Association (NUOPPA). This association saw it fit to establish its own research farm in Loro, Apac district in order to contribute to developing an organic package that will bring the level of productivity to that of conventional cotton. With USAID APEP TA support and through a SAF agreement this research farm is currently validating the one organic pesticide (neem-based) registered in Uganda and at the same time, testing 6 new candidate products for organic pest control. These include 3 botanicals and 3 bio-rationals (micro-organisms pathogenic to the major cotton pests).

Data obtained from focus group discussions with about 200 farmers in 9 major cotton producing districts (Exhibit VI) show that production improvement has resulted in enhanced incomes, even at the fairly low producer price and unfavorable weather experienced during the 2006/07 cotton season.

**Exhibit VI: Cotton Cost of Production Analysis**

| Parameter | Traditional | Low input | High input |
|---|---|---|---|
| Yield (kg/acre) | 200 | 350 | 800 |
| Unit cost of production (USh/kg) | 460 | 393 | 348 |
| Gross income (USh/ac) | 90,000 | 164,500 | 376,000 |
| Net income (USh/ac) | -2,000 | 26,950 | 97,600 |
| Output:input ratio | 0.98 | 1.20 | 1.35 |

The quality of seed emanating from the 2006/07 season was extremely poor. In some areas, this seed failed to germinate completely or had germinations as low as 30%. This has led to reduced producer confidence and a reduction in area planted or poor stands for the 2007/08 cotton crop season.

Production of cotton has remained problematic in Uganda due to price, biotic and abiotic stress factors. Low capacity utilization in the ginning sector has bid up the price of seed cotton (with short-run benefits to farmers), and it has encouraged poaching of seed cotton resulting in a collapse of the zoning system. This, combined with low ginner margins, has eroded incentives to provide extension services, crop inputs and PO strengthening to farmers (who will then suffer in the long-run). Without a good production or price season, conventional cotton will stagnate. There are good prospects for organic cotton, but only if there can be an effective package developed so yields can be enhanced.

## Coffee

During the reporting period (October 2006-September 2007) Uganda's coffee exports totalled 2.7 million 60-kg bags, equivalent to 162,255 mt valued at $257 million. This represents an overall increase of 36% and 51% in volume and value respectively over 2005/06 as shown in Exhibit VII. The improved performance in volume is attributed to the favourable weather conditions, coupled with high world market prices hence good farm gate prices and increased level of adoption of good agricultural and management practices by some coffee farmers. There is also supply response from the surviving trees of the GOU coffee replanting program.

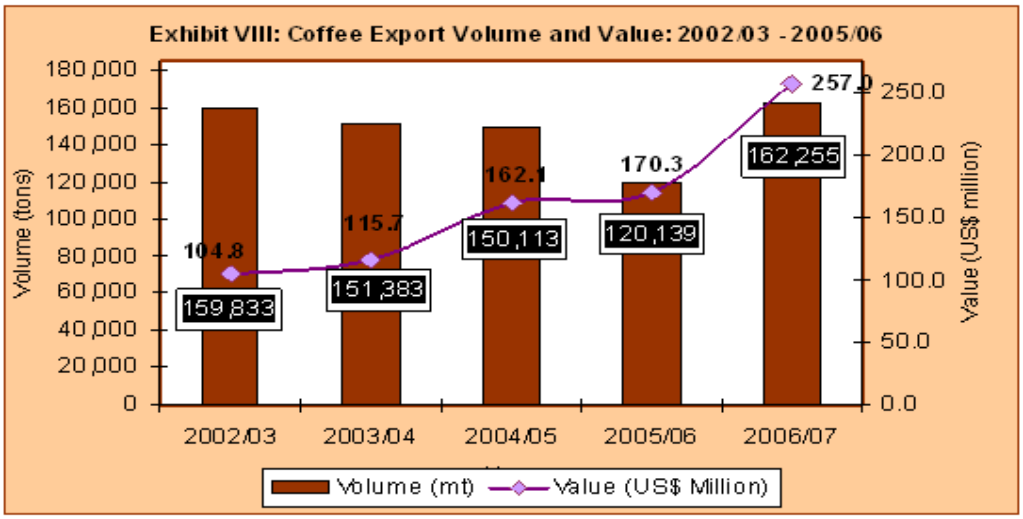
During the period under review, Kiboko (Robusta coffee dried cherries) farm gate prices ranged from USh900-1,200 per kg. The hulled dried cherry coffee (FAQ) prices ranged from USh2,000-2,300 per kg. Arabica parchment coffee prices in the Mt. Elgon region ranged from USh2,500-2,800 per kg.

**Exhibit VII: Comparison of Monthly Coffee Export Volumes and Values: 2005/06 and 2006/07**

| Month | 2006/07 | | 2005/06 | | % Change | |
|---|---|---|---|---|---|---|
| | Vol (60kg bags) | Val (US$) | Vol (60kg bags) | Val (US$) | Volume | Value |
| October | 155,571 | 13,357,091 | 121,696 | 9,280,806 | 27.8 | 43.92 |
| November | 250,728 | 22,960,240 | 182,053 | 14,472,486 | 37.7 | 58.65 |
| December | 248,709 | 22,207,999 | 180,344 | 14,849,249 | 37.9 | 49.56 |
| January | 316,128 | 28,367,743 | 228,714 | 19,679,281 | 38.2 | 44.15 |
| February | 222,099 | 20,145,787 | 165,762 | 16,113,588 | 34.0 | 25.02 |
| March | 265,399 | 24,222,366 | 155,960 | 14,630,894 | 70.2 | 65.56 |
| April | 137,156 | 12,955,518 | 146,642 | 13,714,424 | -6.5 | -5.53 |
| May | 184,560 | 17,906,947 | 123,321 | 10,967,328 | 49.7 | 63.28 |
| June | 244,789 | 24,318,778 | 187,448 | 14,575,446 | 30.6 | 66.85 |
| July | 268,864 | 28,339,099 | 176,310 | 13,711,673 | 52.5 | 106.68 |
| August | 230,849 | 23,921,182 | 175,526 | 14.380,876 | 31.5 | 66.34 |
| September | 179,394 | 18,337,887 | 158,548 | 13,969,847 | 13.2 | 31.27 |
| **Total** | **2,704,246** | **257,040,637** | **2,002,324** | **170,345,898** | **35.6** | **50.89** |

*Source: UCDA*

An analysis of the coffee export performance over the past five coffee seasons is shown in Exhibit VIII. It may be observed that the 2006/07 coffee export value is way over that achieved over the past five years. Indeed since the 1998/99 coffee season, Uganda's coffee export value had not exceeded US$200 million in any single year.




USAID APEP focused its activities and resources during the reporting period on training farmers on quality improvement and improved agronomic practices through demonstration fields, farmer-enterprise linkages and bulking for the market as well as a replanting program as a short-term solution to replace the old and wilt affected coffee trees. As a long-term solution to combating CWD, USAID APEP committed resources to COREC to accelerate the progress towards the development of Robusta coffee wilt disease resistant varieties and refine the current clean plantlet multiplication techniques. Part of the resources committed will be used for on-farm field validation trials of pre-selected twenty seven on-research station Robusta CWD resistant clones in collaboration with USAID APEP corporate enterprises and their collaborative farmers in multi-locations in the districts of Kamuli, Ibanda, Mityana and Mukono. Similarly, financial support was provided for work on proof of concept of technologies to develop a faster approach to multiplication of coffee planting materials through Xclusive Cuttings. Equally, through a joint ASPSII initiative, support was provided to a private tissue culture laboratory, AGTL, to validate protocols for direct somatic cell embryogenesis techniques for rapid multiplication of coffee plants from leaf discs of CWD tolerant lines.

USAID APEP TA worked closely with UCDA, COREC, district agricultural sub-county extension staff and extension staff from the private exporters as well as the PO and DC leadership and agro-input suppliers through the use of the coffee field demonstrations established for coffee-related trainings. Through this collaboration for example, input suppliers were able to introduce hitherto unavailable on the local markets, smaller quantities of inorganic fertilizers including 5kg or 10kg or 50kg packs affordable to farmers' and suitable for promotion of adoption on an incremental basis. According to field day records, a total of 47,138 farmers that included 9,789 females benefited from both the newly established and existing demonstration sites.

The benefits of adopting improved management practices are now being realized as field observations and farmer responses indicate increased yields and improved quality. For instance, during the reporting period, farmers who picked ripe cherries and used tarpaulins to dry their coffee received a premium of 10% for Arabica and 15% for Robsuta over ruling market prices. Yield per tree results from demonstrations, adopters and confirmed by sentinel site data has shown yields of 2.2 kg of kiboko per tree for Robusta and 0.9 kg of parchment per tree equivalent for Arabica, which are 2-4 times the traditional yields. These improvements have resulted in increased incomes and are reflected in Exhibit IX below.

**Exhibit IX: Yield and Income Enhancement through Technology Adoption**

| | Trees per acre | Base yield (kg/tree) | Improved yield (kg/tree) | Base price (Shs/kg) | Improved price (Shs/kg) | Improved income (Shs/acre) | Base yield (kg/acre) | Improvement (Shs/acre) | % improvement |
|---|---|---|---|---|---|---|---|---|---|
| Robusta (as kiboko) | 440 | 0.65 | 2.2 | 950 | 1,150 | 1,113,200 | 376,200 | 737,000 | 196% |
| Arabica (as parchment) | 672 | 0.25 | 0.9 | 2,400 | 2,650 | 1,602,720 | 403,200 | 1,199,520 | 298% |

*Adop*tions (particularly pruning, desuckering, mulching, water conservation measures and improved harvesting) have shown significant economic performance enhancements as highlighted in Exhibit X. These data are based on focus group discussions held with more than 210 coffee farmers in 6 major Robusta growing districts – Bushenyi, Ibanda, Rakai, Masaka, Mubende and Kamuli.

**Exhibit X: Robusta Coffee Efficiency Comparison by Technology**

| Parameter | Traditional | Low input | High input |
|---|---|---|---|
| Yield (kg/acre) *Kiboko* | 400 | 800 | 1,800 |
| Unit cost of production (USh/kg) | 483 | 356 | 294 |
| Gross income (USh/ac) | 320,000 | 800,000 | 1,800,000 |
| Net income (USh/ac) | 127,000 | 515,200 | 1,270,800 |
| Output:input ratio | 1.66 | 2.81 | 3.40 |

Despite the positive developments, challenges still do exist. It takes a period of not less than 2 years for some coffee technologies to produce tangible results for the potential adopters to emulate. Just this season some traditional coffee growing regions such as Nebbi and Arua were introduced to improved coffee technologies. More support and work is yet to be done in order for the farmers to appreciate the importance of improved technology in coffee production. Another challenge is coffee leakages from PO's and DC's. High quality dried cherry (kiboko) coffee coupled with economically viable quantities that PO members produced have brought in fierce price competition to the extent that some times the corporate partners are only able to buy from the DCs or POs members as little as 25% and the rest is bought by the other coffee traders who de-husk the dried cherry (Kiboko) into green coffee beans (FAQ) and sell it to the exporting enterprises mixed with other substandard quality. This trend is likely to discourage sustainability of the corporate provision of extension support services.

## Sunflower

USAID APEP continued to collaborate with A.K. Oils & Fats (U) Ltd in Masindi, Lira, Apac and Oyam (formally part of Apac) districts. The 31,291 farmers under this scheme planted approximately 71,160 acres from the 142,320 kg of seed of PAN 7351 hybrid sunflower that

was sold in the OGS during the 2006B and 2007A seasons. During the work plan year 19,100 mt of sunflower grains were procured by A.K. Oils & Fats (U) Ltd for the 2006B season and 8,600 mt sunflower grain was procured for the 2007A season crop (harvest not complete at the time of reporting) resulting in a farm gate income of US$5.03 million for the reporting year. A.K. Oils & Fats (U) Ltd has constructed a new oil mill in Lira with a daily crushing capacity of 80 mt, at an investment of approximately $1.4 million effectively doubling the company's processing capacity. The first 10 mt tanker of oil has been dispatched to the refinery in Kampala. The total crushing capacity of the company is now 180 mt per day. This will support 58,000 mt of raw material and hence opens up the possibility for expansion in 2008.

There was also a continued collaboration with Sanyu Agro Industries Ltd, a relatively new company in the oil milling industry. The company operates in Nebbi district, where an outgrower scheme of about 3,083 collaborating farmers has been developed. A total of 1,700 kg of the PAN 7351 hybrid sunflower seed (enough to plant 850 acres) was made available during the work plan year. However, the 2006B season was the first time for such an intervention in the area, and only about 400 kg of seed was bought by farmers and only 200 acres were planted. At the end of the 2006B season, 17,169 kg of sunflower grains were procured by Sanyu Agro Industries Ltd resulting in a gross income of USh6.9 million to the collaborating farmers. The demonstration program for the 2007B season has been well effected by the company with the establishment of 101 demonstration sites. These have developed very well and the farming community is beginning to appreciate the crop. As a result, 1.3 mt of seed has been distributed to growers for their first real commercial crop.

A total of 34,374 (31,291 with A.K. Oils & Fats (U) Ltd and 3,083 with Sanyu Agro Industries Ltd) collaborating farmers have been registered in the out-grower schemes (OGS) to-date. Of these 14,307 are women (13,358 under A.K. Oils & Fats and 1,212 under Sanyu Agro Industries).

The collaborating farmers registered in the A.K. Oils & Fats OGS were introduced to improved production practices through 1,428 technology transfer sites established in the operation areas during the season 2006B. The technology transfer sites exhibited two packages namely; the high external input and low external input packages. The high external input package demonstrated proper agronomic practices including the use of improved seed "PAN 7351", Glyphosate herbicide and Diammonium phosphate fertilizer. The low external input package demonstrated improved seed and proper agronomic practices without other external inputs. The average yields realized from the demonstration sites were 908 kg per acre from the high input blocks and 533 kg per acre from the low input blocks. The 2007A season has witnessed further USAID APEP support to the company through demonstration establishment of 500 sites using the newly introduced Monsanto hybridals, DKF 6822.

Sanyu established 185 demonstration sites during the 2006B and 2007A seasons. The demonstration program for the 2007A season had a poor performance due to the unreliable and uneven distribution of rainfall in the area. The success of the sunflower program has stimulated interest from other oil millers. Nile Agro Industries Limited has expressed interest in a full program for the 2008A season and has an eventual target of 50,000 mt of production to fill its crushing capacity of 150mt per day. This interest will be developed for Eastern Uganda in 2008.

**Exhibit XI: Sunflower Efficiency Comparison by Technology**

| Parameter | Traditional (Sunfola) | Low input (Hybrid) |
|---|---|---|
| Yield (kg/acre) | 250 | 600 |
| Unit cost of production (USh/kg) | 462 | 305 |
| Gross income (USh/ac) | 62,500 | 210,000 |
| Net income (USh/ac) | -53,000 | 27,000 |
| Output:input ratio | 0.54 | 1.15 |

Data from 40 sentinel sites and focus group discussions with 120 sunflower producers in Masindi, Lira and Apac districts showed that despite the unfriendly weather, sunflower hybrid is a more profitable variety than Sunfola as shown in Exhibit XI.

## Sesame

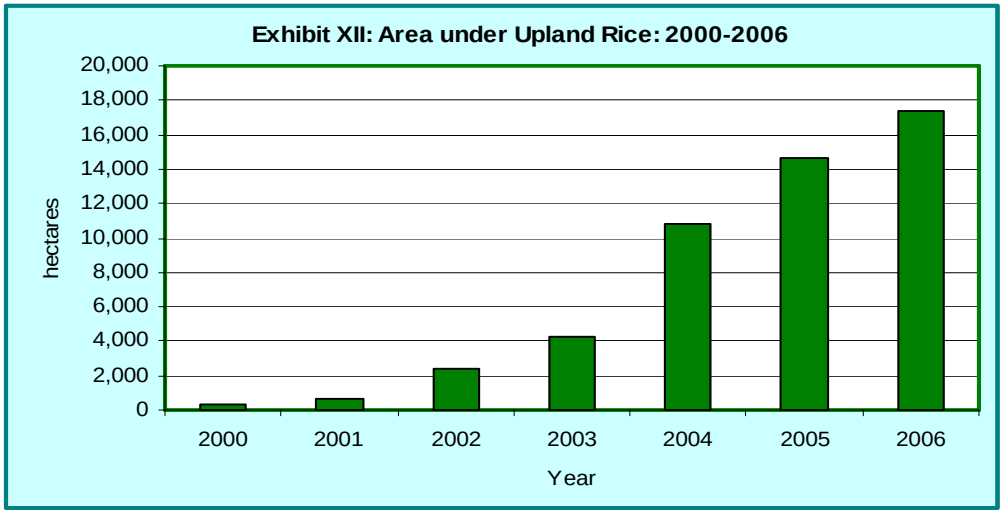
USAID APEP continued collaboration with four (4) sesame trading companies namely; Olam (U) Ltd and CARE Uganda/Nile Pro Consult Ltd/UNO Trading Co. Ltd in West Nile region (Nebbi, Arua and Yumbe districts); and Outspan Enterprises Ltd (Northern Uganda Eco Organic Ltd) and Lango Organic Farming Promotion/Shares! (U) Ltd in the Lango/Teso region (Kaberamaido, Apac, Oyam and Lira districts) during the 2006B season. Conventional and organic sesame production was promoted in West Nile and Lango/Teso sub-regions respectively. During the season 2007A, Olam (U) Ltd and Outspan Enterprises Ltd continued to provide a full range of support services to the collaborating farmers registered in their respective OGSs using the USAID APEP extension model. A total of 47,500 farmers were registered by the different companies for sesame production. In West Nile, Olam (U) Ltd and CARE Uganda distributed 26,500 kg of improved seed "Seism II" variety to the farmers registered in their respective OGSs. The seed was used to plant 8,830 acres. The total procurement of sesame in the two regions was 1,330 and 1,400 mt of conventional and organic sesame with a value of USh1.33 billion and USh1.63 billion respectively.

The collaborating farmers registered in the OGSs were introduced to improved production and post-harvest handling practices through 836 technology transfer sites established in the West Nile and Lango/Teso sub-regions during the period. A total of 13,012 farmers were exposed to improved production practices through the low external input technology transfer sites. The average yield obtained from the technology transfer sites was 350 kg per acre compared to the traditional crop production system, which yields approximately 150 kg per acre. Olam has registered up to 10,000 farmers for organic sesame in West Nile. A total of 7 mt of seed has been distributed to plant 2,800 acres of sesame in the 2007B season. The company committed to supporting 28 field staff currently engaged in this production system.

Outspan Enterprises Ltd, having partnered with Dunavant Uganda Ltd and Lango Cooperative Union to form a new organic company – Northern Uganda Eco Organics - in 2006, has significantly increased its outgrower base. It currently has 20,000 registered organic sesame growers, up from 3,641 at the end of the 2005/06 work plan year. The company is now looking forward to marketing in excess of 2,000 mt of organic sesame during 2007/08. The 38,000 farmers progressing to organic certification in Kitgum and Pader are a target of opportunity for Outspan in the 2008/09 production year.

## Upland Rice

The momentum for modernizing the Ugandan rice sub-sector is growing as new technologies have been made available to farmers in Uganda since 2003 through the demonstration plots, technical advice (service provision) as well as through political support with various partners and this has led to an increase in area under upland rice (Exhibit XII). As is the case for maize, and other food security crops, data on number of farmers, area under production, output, and geographic coverage is very difficult to ascertain for this smallholder crop.




USAID APEP has been using the value chain approach specifically improving production, processing, policy and marketing of rice. A cumulative total of 3,111 demonstration sites (each between ½-1 acre) were established in the reporting year with a cumulative total of 44,408 farmers being trained in upland rice production by end of September 2007.

Data from 40 sentinel sites and focus group discussions held with about 130 upland rice producers in 5 major upland rice producing districts indicate good returns resulting from adoption of improved rice production practices (Exhibit XIII).

**Exhibit XIII: Upland Rice Efficiency Comparison by Technology**

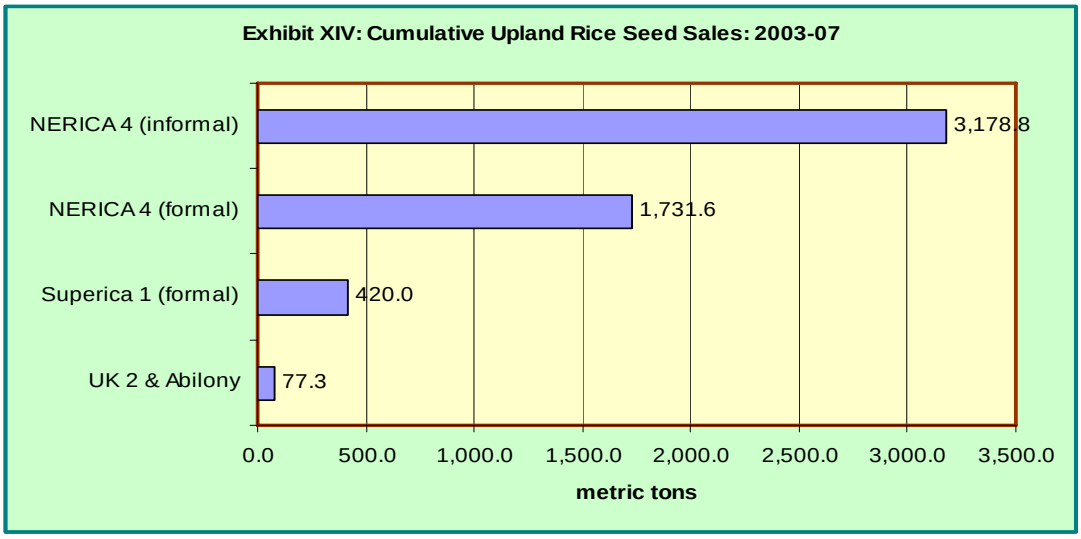
| Parameter | Traditional | Low input | High input |
|---|---|---|---|
| Yield (kg/acre) unmilled | 900 | 1,500 | 2,200 |
| Unit cost of production (USh/kg)* | 263 | 239 | 190 |
| Gross income (USh/ac) | 315,000 | 525,000 | 770,000 |
| Net income (USh/ac) | 78,300 | 166,500 | 352,200 |
| Output:input ratio | 1.33 | 1.46 | 1.84 |

** Unmilled rice (paddy)*

In order to address the constraints related to farm labor, USAID APEP has, through the private sector, introduced labor saving equipment and chemicals to reduce the drudgery. Rice planters, herbicides for weeding, threshers for harvesting and pest control methods have been introduced amongst the rice producers. The product to reduce bird pressure (Bird Shield®) is still under test by Balton as the main agent.

With the improved security situation, USAID APEP focused on upland rice promotion in Northern Uganda. USAID APEP through its SAF support to SOMED, the OVP and CARITAS provided TA in training and market linkages to upland rice growing in Gulu concentrating on production around 5 decongested camps. Rice production at the Kyaka refugee camp in Kyenjojo has become the major economic activity for 2,000 farming families resident in the camp. USAID APEP continued to work with various partners (JICA, NAADS, A2N SG 2000 UNDP, Office of The Vice President, SOS–Gulu program, ICR, Caritas SOMED, Centenary Bank, CMF, PMA, AAH, OPM, UNHCR, CBOs, rice processing companies, traders and farmers through its demonstration and technical assistance program to achieve the goal of reducing rice imports by 40% and increasing quantity and quality of Ugandan rice in the next five years.

The expansion in upland rice production has opened up new opportunities in input supply. Seed sales have increased significantly over the past four years (Exhibit XIV) with both NASECO and FICA seed companies selling rice seed to farmers. Currently 5 varieties have been released to farmers for the upland rice production; NERICA 4 (Superica 2 and NARIC III) Superica 1, NARIC I, and NARIC II. Nerica 1 and 10 have recently been added to the official list of approved varieties.




Regarding agro chemicals for rice, it is interesting to note that 4 years ago, Saturnil® was the only herbicide for rice available and this was only "on the market" through smuggled aid supplies out of Rwanda. FICA imported directly in 2002/3 and now there are 3 new companies dealing with selected herbicides for rice. Among these are Keith Associates and General & Allied who are being supported by the ATAIN program of USAID APEP. Among the input technologies that have been promoted, fertilizers rank the lowest in terms of adoption.

USAID APEP and the Office of the Vice President are also piloting a sustainable smallholder agriculture program in Nakaseke, in which farmers use upland rice as a jump-start enterprise but also involve other profitable farming enterprise to generate daily or perennial income or revenue, such as improved coffee production, fish farming and dairy cattle. USAID APEP has been appointed as a technical advisor on the Uganda NERICA promotion by FAO/JICA. USAID APEP's role is to advise the steering committee on technical issues in the promotion of NERICA in Uganda. Technical assistance was also provided to the National Planning Authority of Uganda (NPA) to develop an action plan to strengthen the marketing of rice based on building a strong value-chain for the rice industry in Uganda.

USAID APEP through its SAF program continued to support 4 rice processing companies to enhance their production capacity by providing technical assistance and demonstrations to farmers in 7 districts of Bukedea, Kyenjojo, Gulu, Hoima, Masindi, Nakaseke and Kibaale. USAID APEP provided TA to the 10 rice processing companies in paddy sourcing, quality processing and market linkages.

## Maize

During the reporting period, USAID APEP provided limited TA to commercial maize farmers in the main growing areas of Kapchorwa, Masindi, Mubende, Bugiri, Iganga, Kamuli and Kiboga districts. The commercial maize farmers in these areas received technical training in institutional development, crop husbandry and post-harvest handling, marketing as well as linkages to input suppliers, buyers and financial service providers through the Producer Organization Trainers (POTs).

Of note is the excellent work being carried out in Bugiri, totally independent of any external support. Since USAID APEP has withdrawn its active field training, demonstration and market linkage support, the PO-DC system has had to provide all the internal services required to maintain the production to market system for maize. During this reporting year, the DCs independently marketed a total of 5,345 mt of maize grains and procured 67 mt of seed through the POs. This development supports the assertion that the USAID APEP model is commercially sustainable, and that in fact, with or without corporate linkages,

commercial production systems can be sustained. Application of this experience to the other USAID APEP commodity chains serves to emphasize the need for intensive PO support.

According to the Regional Agricultural Trade Intelligence Network (RATIN) database, about 92,200 mt of maize grains were traded across the borders with Kenya and Rwanda. At an average price of US$165 per mt, Uganda earned about US$15.21 million through the cross border trade in maize grains. With WFP procurements of 37,000 mt, Uganda's maize exports during the reporting period reached approximately 130,000 mt, valued at US$21.45 million.

Data from 35 sentinel sites and focus group discussions held with about 120 maize producers in 5 districts indicate good returns resulting from adoption of improved maize production practices (Exhibit XV).

**Exhibit XV: Maize Efficiency Comparison by Technology**

| Parameter | Traditional | Low input | High input |
|---|---|---|---|
| Yield (kg/acre) | 600 | 1,750 | 2,800 |
| Unit cost of production (USh/kg) | 166 | 123 | 113 |
| Gross income (USh/ac) | 120,000 | 350,000 | 560,000 |
| Net income (USh/ac) | 20,600 | 134,750 | 244,300 |
| Output:input ratio | 1.20 | 1.63 | 1.77 |

## Barley

The reporting period witnessed on-going collaboration between Uganda Breweries Limited (UBL)/East African Maltings Limited (EAML) and USAID APEP through the SAF program for the production of barley in Kapchorwa and Bukwo districts. A total of 3,100 and 1,000 farmers were registered in the out-grower schemes in Kapchorwa and Bukwo districts, respectively. About 187,000 kg (Karne and Sabini varieties) of imported of seed were sold on credit to collaborating farmers during the season. A total of 1,050 mt of grain was procured realizing a farm-gate value of USh420 million.

The collaborating farmers were introduced to improved production and post-harvest handling practices through 54 technology transfer sites in 2006B and 56 sites for 2007A. The technology transfer sites exhibited two packages namely; the high external input and low external input packages. The high external input package demonstrated proper agronomic practices including the use of a selective herbicide Buctril® (as well as the PERSUAP replacement product for 2008, Hussar® Iodosulphuron-methyl–sodium), Diammonium phosphate and Urea fertilizers, and a fungicide Folicur 250EC (Tebuconazole - PERSUAP approved). The low external input package demonstrated proper agronomic practices without external inputs except a fungicide Folicur 250EC®. The average yields realized from the demonstration sites were 1,200 and 730 kg per acre from the high and low input fields, respectively. USAID APEP has continued to collaborate with UBL/EAML in with the expansion phase made into Bukwo district in the promotion of barley production. There now exists a separate Sebei Cereal Farmers Association in the district with 1,000 farmers who planted 800 acres of crop for the 2007A season (the area only has one production season). Technical training was provided to 111 lead farmers in 2006B season to establish and manage the technology transfer sites rolling out improved practices to the rest of the farming community. This effort supported 3,100 collaborating farmers during the 2007A season.

Production of barley over the past 2 seasons has, however, fallen sharply. This has been as a result of confusion created by the intervention of East African Maltings Ltd in the promotion and procurement processes. Confusion arose over input supply and critically the payment mechanism for produce. Producer confidence declined and is being addressed by all concerned as USAID APEP supports the 2007B production season by strengthening the 100 POs involved in barley production. There continues to be strong growth in demand for the local Senator brand of beer produced with barley. It has exceeded the demand for local sorghum Eagle lager beer produced by the competitor Nile Breweries.

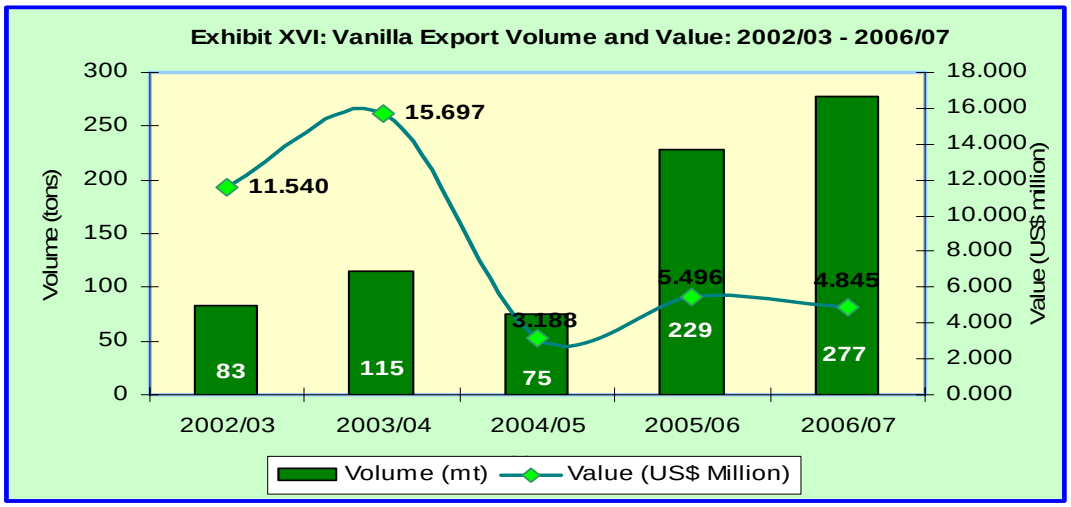
## Vanilla

Financial and technical assistance by USAID APEP has been extended to the industry through VANEX resulting in a tremendous growth both in terms of coverage/outreach and

export volumes although export value has not increased drastically due to slow recovery of the international market prices.

During the reporting period, a 4-day residential refreshers' training-of-trainers course was conducted for 72 VANEX staff and 10 NAADS coordinators. In collaboration with USAID-funded PSI project, participants were sensitized on issues related to HIV/AIDS. Furthermore, a series of training events were conducted leading to an exposure of 9,285 vanilla growers to improved production practices through the 60 existing demonstration sites and farmer outreach extension programs. Emphasis was put on training farmers in improved field management practices such as shade management, mulching, proper looping, pollination, harvesting and quality control. Additionally, VANEX extension services have reached out to more farmers through weekly radio programs on three radio stations (CBS FM, VOT FM and Kiira FM). USAID APEP, working together with VANEX, continued with activities aimed at implementing the Code of Practice (CoP) for the Vanilla Industry. Ten existing processing/exporting companies were pre-audited with regard to CoP. To sustain the program after the SAF terminates, four of the existing regional coordinators have been confirmed to be taken up by individual VANEX member companies to continue with the extension services in Bundibugyo and central region. The radio broadcasts have been effective and it is likely that VANEX will continue these broadcasts on at least one radio station. The existing 10 exporters are all firmly linked with the international market.

Export records indicated a total of 277 tons of cured vanilla were exported, of which 79 tons were air shipped while 198 tons were by less expensive sea freight. International prices for cured extract grade vanilla remained low at US$12-25 per kg. It is estimated that vanilla exports realized about US$4.87 million during the reporting period. Vanilla export trends over life of project are presented in Exhibit XVI.




## Banana (Matooke)

With financial and technical support from USAID APEP, the International Institute of Tropical Agriculture (IITA) continued to carry out on-farm research focusing on increasing profitability of bananas through improved production techniques/practices and evaluation of 4 new matooke hybrids. Preliminary results from the on-farm studies showed banana production is influenced to a greater extent by soil fertility status and crop management practices as compared to pests – the traditional research approach to production constraints. Fertilizer application was the most important parameter contributing towards increased yield, resulting in up to more than 50% increase in bunch weight (Exhibit XVII. Across the 9 districts, demonstration plots under rehabilitation had higher yield figures as compared to control plots.

**Exhibit XVII: Average bunch weights, bunch cycle and yield of banana per year**

| District | Average Bunch Weight (kg) | | Cycles (Bunches $mat^{-1}$ $yr^{-1}$) | | Yield (t $ha^{-1}$ $yr^{-1}$) | |
|---|---|---|---|---|---|---|
| | Control | Demo | Control | Demo | Control | Demo |
| Mbale | 20.0 | 24.6 | 1.1 | 1.2 | 25.3 | 31.9 |
| Wakiso | 10.8 | 16.5 | 1.0 | 1.3 | 17.9 | 28.6 |
| Luwero | 10.7 | 12.1 | 0.7 | 1.1 | 13.2 | 17.2 |
| Mukono | 13.7 | 14.9 | 0.6 | 0.9 | 8.1 | 17.2 |
| Mpigi | 11.3 | 16.9 | 0.8 | 1.1 | 12.3 | 22.8 |
| Masaka | 10.8 | 13.9 | 0.7 | 1.2 | 14.0 | 20.8 |
| Rakai | 9.1 | 12.5 | 0.7 | 1.0 | 9.4 | 15.7 |
| Mbarara | 14.2 | 19.4 | 1.0 | 1.2 | 16.8 | 22.0 |
| Bushenyi | 17.3 | 20.7 | 1.1 | 1.3 | 23.2 | 27.8 |

Eight macro-propagation units were constructed in 4 districts (Mukono, Mpigi, Masaka and Rakai) whereby about 800 farmers were trained in rapid multiplication of bananas. Each macro propagation unit is capable of multiplying from clean corms, an average of 3,000 plants per annum off 7.5 $m^2$ of nursery area. The nursery operator is able to sell the planting material at USh800-1,000 per plant with a resulting gross income of USh2,400,000-3,000,000 per annum per unit. This is encouraging additional establishment and it is anticipated that an additional 20 units will be established in the next year. With financial assistance from USAID APEP, Mukono farmers exhibited the banana macro–propagation technology during the National Agricultural Show held at Jinja and more than 1,000 people visited the stand.

During the reporting period, USAID APEP continued with the provision of financial and technical assistance to banana farmers through 215 demonstration sites in 9 districts. Through these sites and farmer training, 8,360 farmers were exposed to improved banana production and maintenance practices, with about 58% being females. The prolonged rains in most places coupled with good management practices that incorporated use of inputs such as tissue culture materials, fertilizers, mulch and crop protection enhanced banana productivity and production. Returns from well managed demo sites indicated average bunch weights of 30 kg with extremes of 40–60kg from some parts of Bushenyi and Manafa/Mbale. Farm gate prices ranged between USh3,000 and 10,000 per bunch, depending the region and size of the bunch. Several farmers under the establishment program sold out suckers to collaborating farmers at a price range of USh300 and 1,000 per sucker. With persistence of the BBW outbreak, coupled with banana weevil and nematode infestation, availability of clean planting materials remains a big challenge.

Through a USAID APEP SAF, INIBAP/Bioversity was funded to carry out trials on understanding Banana *Xanthomonas* wilt control options and post-infestation replanting interval using participating farmers' fields as research venues in Luweero and Mukono districts. At completion of field activities, an economic viability analysis of the different control options was conducted. The results were presented at workshop in Kampala on 9/28/2007.

**Exhibit XVIII: Banana Efficiency Comparison by Technology**

| Parameter | Traditional | Low input | High input |
|---|---|---|---|
| Yield (kg/acre) | 6,000 | 12,000 | 26,000 |
| Unit cost of production (USh/kg) | 20 | 22 | 18 |
| Gross income (USh/ac) | 600,000 | 1,440,000 | 3,250,000 |
| Net income (USh/ac) | 480,000 | 1,176,000 | 2,782,000 |
| Output:input ratio | 5.00 | 6.00 | 6.94 |

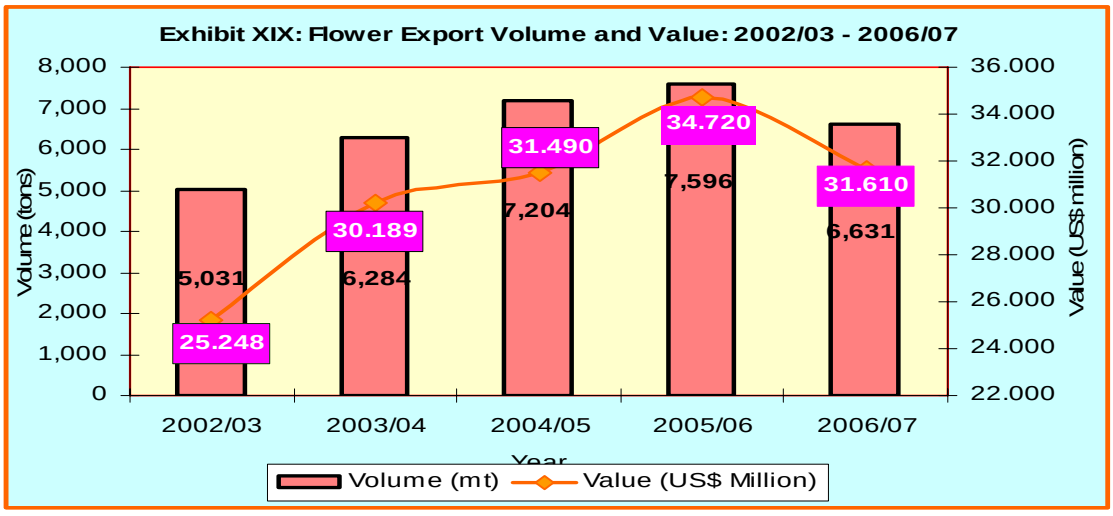
Data from 30 sentinel sites and focus group discussions held with about 90 banana producers in 3 major producing districts indicate good returns resulting from adoption of improved banana production practices (Exhibit XVIII).

## Flowers

With SAF support from USAID APEP, UFEA continued to support the industry through research, training and market promotion. USAID APEP TA together with UFEA continued to focus on the issue of quality assurance, standards and certification as laid down in the national and international codes of conduct for the cut-flower industry. Milieu Project Sierteelt (MPS) and European Retailer-Producer Good Agricultural Practices (EUREPGAP) inspections on flower farms continued. All flower farms except for 2 registered with MPS ABC program. Rose growth trials on locally available substrate materials were completed. Results indicated Kabale cinders (stones) as the best locally available substrate materials and already some flower farms have started using it. At the capacity building level, 18 mid-level supervisors completed training under the Applied Tropical Floriculture (ATF) program.

Three farms phased out growing of roses and diversified into cuttings/potted plants. The industry also experienced a reduction in rose acreage of 30 ha due to greenhouse damage by heavy rain storms coupled with financial constraints as products under diversification or under expansion had not come into full production.

The prolonged overcast El Nino weather caused reduction in the plant growth and also high incidences of downy mildew causing a significant reduction in export volumes. Export volume of both roses and cuttings were 6,631 tons, with an estimated value of US$31.58 million (Exhibit XIX). Cold chain management, however, still remains a challenge as the cold store space at FHL needs expansion. Furthermore, south bound freight to reduce costs of freighters remains an issue. Also high costs of fuel and power continue to make Uganda less attractive to flower investment and unless some of the policy issues are addressed, Uganda will continue to lose potential new investors to other more attractive centers of production such as Ethiopia.



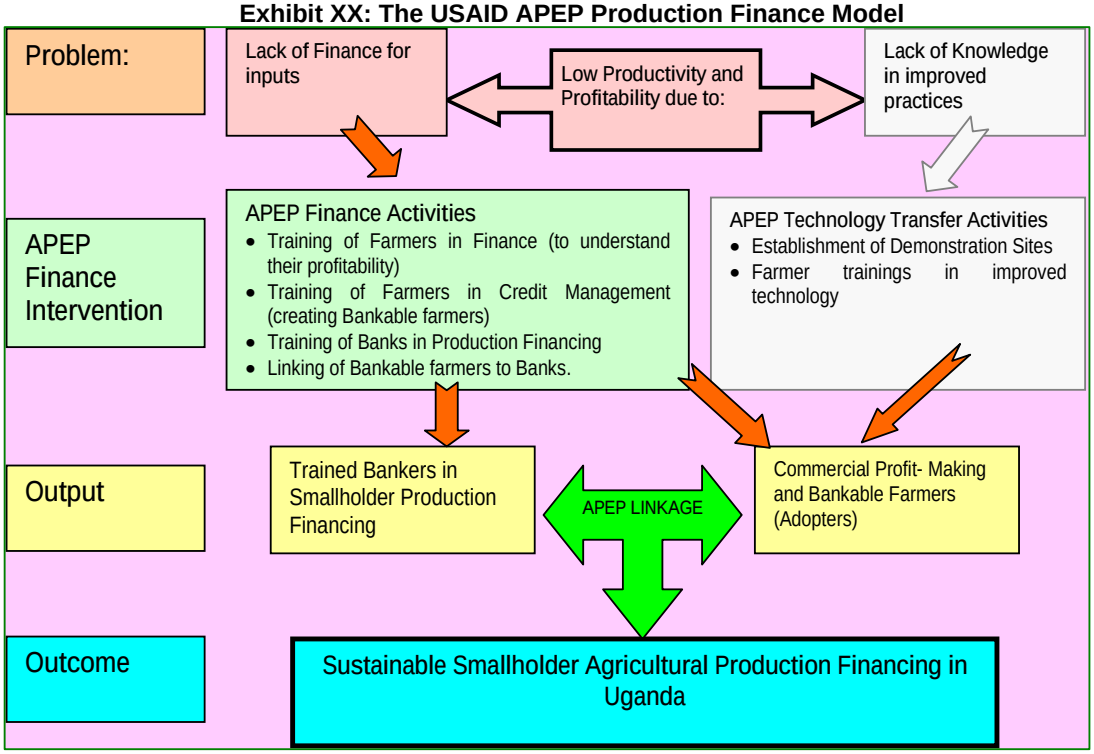

Pearl Flowers continued with its expansion and diversification into high altitude rose growing in Ntungamo, western Uganda. A total of 10 ha were planted of which 6 ha are already in production. Construction of stores, fertigation unit, cold chain facilities, and packing station were completed. Over 40 rose varieties were introduced for performance testing, and 3 varieties were selected for commercial production. Quality remarks from the market indicated better quality flowers with longer stems and bigger head size fetching higher per-stem price.

## Agricultural Finance

Formal agricultural lending to smallholders in Uganda had suffered from an unfavorable investment climate, politicization, poor management including poor client selection, lack of emphasis on savings mobilization, disregard to clients' technical knowledge, and lending at unrealistically low interest rates. This led to the collapse of formal lending programs such as the Rural Finance Scheme which left and accentuated a gap in seasonal finance particularly for crop production.

The USAID APEP production financing strategy is a vital complementary function of the technology transfer program. The USAID APEP technology transfer program creates adopters with effective demand for off-farm inputs and thus the inevitable need for additional finance. However, the USAID APEP strategy requires that a comprehensive understanding of "profit after interest" by the farmer is a precondition. This is achieved through specialized training of commercial adopters in production finance and credit management as a prerequisite to approaching financiers. To rationalize borrowing, farmers are trained to prioritize the use of borrowed funds for income enhancing inputs like fertilizers, manure, and herbicides that will ensure increased yield and thus sufficient profit after interest. The USAID APEP production model is depicted in Exhibit XX.

**Exhibit XX: The USAID APEP Production Finance Model**




The USAID APEP model is a complete refinement of various previous small holder financing endeavors which mainly considered farmers' demands for inputs with no regard to "use know how" or where farmers borrowed because of availability of open-handed credit facilities. The commodities targeted and recommended for financing are those with demonstrated profitability, commercialization and manageable risk levels. Upland rice, coffee, banana and maize are some of the preferred crops currently being financed.

The final recipe of the USAID APEP strategy is the linking of the clients and the financier which is cautiously effected using independent farmer representatives to avoid politicization or donor ownership that are known to greatly fuel strategic default. For the financiers (presently Centenary Bank and CMF), the USAID APEP Strategy is to promote agricultural finance by progressive advocacy and capacity building to ensure complete commodity understanding in regards to profitability, seasonality and risks by the financing institutions.

Advocacy for agricultural lending is fostered with key decision makers at bank headquarters and branches to promote the expansion of their agricultural portfolios country-wide.

Capacity building of financial institutions is achieved through specialized commodity training of the loans officers on USAID APEP-supported commodities such as sunflower, sesame, upland rice, barley, banana and maize. Essential bank staff training themes of the USAID APEP commodities including *inter alia*:

- Appropriate Production Technologies;
- Seasonality, Marketing and Pricing;
- Economics of various production technologies;
- Input requirement and availability;
- Risk Management strategies; and
- Potential and prospects of each commodity sector.

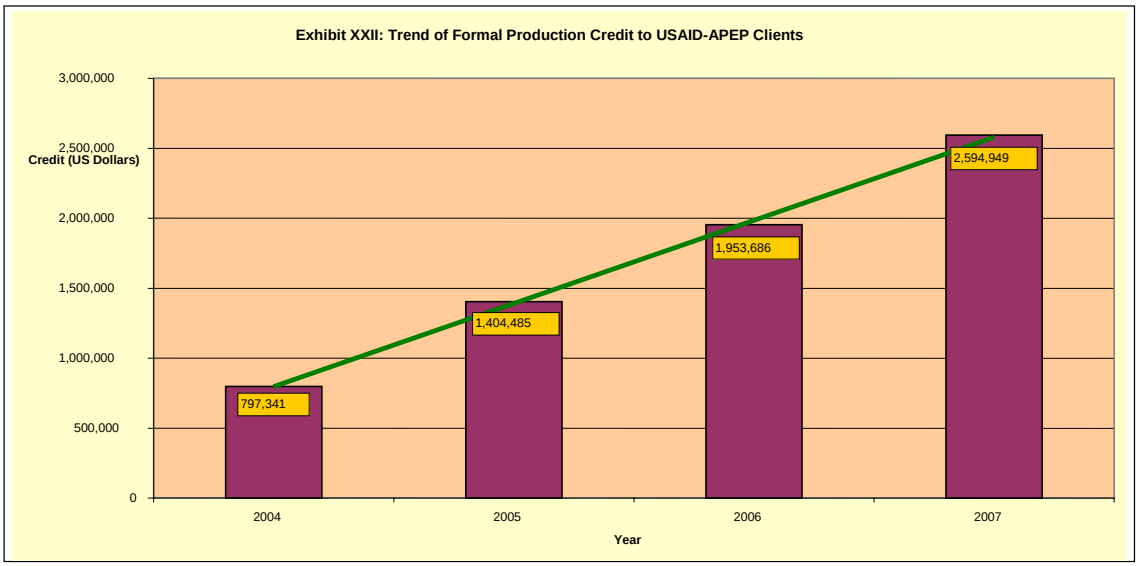
The above are then used as a basis for bankable clientele selection and loan structuring. Previous endeavors considered any requesting farmers with acreage as the key selection criteria and used customary loan structures for agricultural credit.

A comparison of the USAID APEP Strategy with Customary Model (Exhibit XXI) shows the extent to which USAID APEP has refined the previous lending strategy especially in regard to input supply and banker-farmer linkage.

**Exhibit XXI: Comparison of APEP Strategy with Customary Model**

| | **Common Non-Sustainable Model** | **APEP Sustainable Strategy** | **APEP Intervention** |
|---|---|---|---|
| **Inputs:** | Assumed Need (Want without "Use Know How") | Effective Demand (Commercial Adopters) | APEP Technology Transfer |
| **Input Supply** | No Inputs Support | Support to Inputs Supply System | APEP/UNADA Stockist Credit Guarantee Schemes |
| **Finance:** | Bridging Production Costs | Understanding Profit After Interest | Farmer (Adopters) Finance Training |
| **Use** | Borrowing due to Availability of Financing | Understanding What to Borrow for | Farmer Credit Training |
| **Commodity Selection** | General Commodity Prevalence | Profitability, Commercialisation and Risk Management | Bank Training and Technical Assistance |
| **Linking Agent:** | Usually Political Representatives | Independent Farmer Representative | APEP Credit Linkage |
| **Clientele:** | Any Requesting Farmer | Bankable Commercial Farmers only | APEP Adopter Identification and Credit Linkage |
| **Key Client Selection Criteria** | Acreage | Commercialisation and Yield Level | Bank Training and Technical Assistance |
| **Recommended Loan Structuring** | Standard Banking Structure | Based on Cropping Calendar | Bank Training and Technical Assistance |

The production loan outflow to USAID APEP clients in now over US$2.6 million per season by 21 commercial credit outlets countrywide having started with only US$0.797 million through 6 outlets in 2004 (Exhibit XXII). Experience with the USAID APEP backed agricultural lending program shows that successful farmers usually borrow between 30% and 60% of the total requirement based on costs of production analysis. This helps reduce over-financing, and risks of diverting funds to other uses.




To ensure the prompt availability of specialized inputs whose demand has been stimulated by the USAID APEP technology transfer program, financial guarantee support using the existing PL-480/ATAIN funds has been provided to appropriate input suppliers and stockists to facilitate their access to credit facilities for procurement of these inputs. Three suppliers (Victoria Seeds, Keith Associates and General and Allied) have been supported with cash guarantees to their bankers (Bank of Africa, DFCU, and Bank of Baroda) respectively for trade finance facilities.

Credit to agro-input stockists has continued to be promoted also using the PL-480/ATAIN funds for the UNADA stockists' credit guarantee program. This program has eased the inherent financial impediment of stockists through facilitation of access to inputs on credit from willing suppliers whose risks are mitigated under the scheme. On average, agro-inputs worth over USh180 million has been traded annually under the UNADA Scheme between 14 registered suppliers and over 90 stockists countrywide under the scheme.

Despite the successes in agricultural finance, there are a number of challenges which include: climate risk management; banks shying away after "bad experiences"; commodity price risks; banks reluctance to operate independent of donor-supported programs to sustainability generate a clientele base and meet their capacity building needs.

## Agricultural Inputs

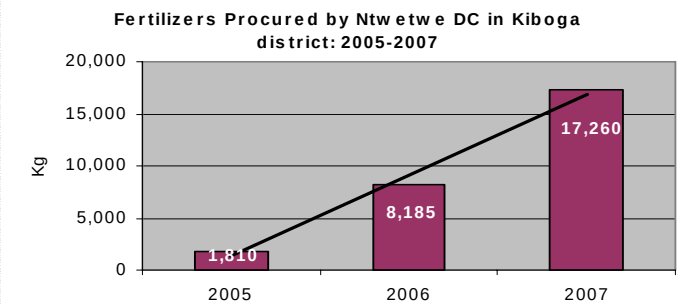
Uganda is passing through an agricultural transformation from traditional subsistence farming to modern commercial farming. However, as the input supply systems have been privatized and liberalized, the input sub-sector seems to have suffered from a benign neglect on the part of both policy makers and donors. As a result, farmers in rural areas do not have easy access to inputs (improved seeds, fertilizers and agro-chemicals), and even where these inputs are available, their prices are very high. This situation forces farmers to rely on subsistence farming methods and thereby live in a vicious cycle of low productivity and poverty.

The USAID APEP approach to input supply has been to allow the private sector take a lead in the agro-inputs business. USAID APEP has provided technical, financial linkage and advisory support which has helped create linkages between the suppliers and users of various categories of agro-inputs. Through its training of over 500 rural stockists and DC managers, USAID APEP has helped create an environment whereby farmers can access genuine inputs at a reasonable price. Farmers in particular have been encouraged, through their POs, to bulk-purchase inputs so as to take advantage of economies of scale.

USAID APEP has focused its training on business and credit management, product knowledge and safe use and customer care and development. USAID APEP has been able to involve some of its Depot Committees (DC's) (Exhibit XXIII) into agri-input business entities in order to service farmers adopting the demonstrated technologies into their production systems in the different areas of operation.

**Exhibit XXIII: Fertilizer Procurement by Ntwetwe DC, Kiboga**

Ntwetwe DC in Kiboga district is one example of a Depot Committee developed into an input business to procure agricultural inputs for the farmers' benefit. The DC serves 120 farmers and it is mainly involved in maize production and bulk marketing. Over a 3-year period, the quantity of fertilizers procured by the DC increased from 1.8 mt to more than 17 mt (an 8½ fold increase).




In order to increase the input outreach, UNADA (Uganda National Agro-Input Dealers Association) was formed to bind all agro-input dealers in the country and to streamline their operations. This has been more instrumental in increasing the input distribution network/chain. Through training and credit schemes, UNADA is being strengthened and expanding gradually to all parts of the country (Exhibit XXIV). At present there are 700 UNADA members of which some are DCs formed by USAID APEP.

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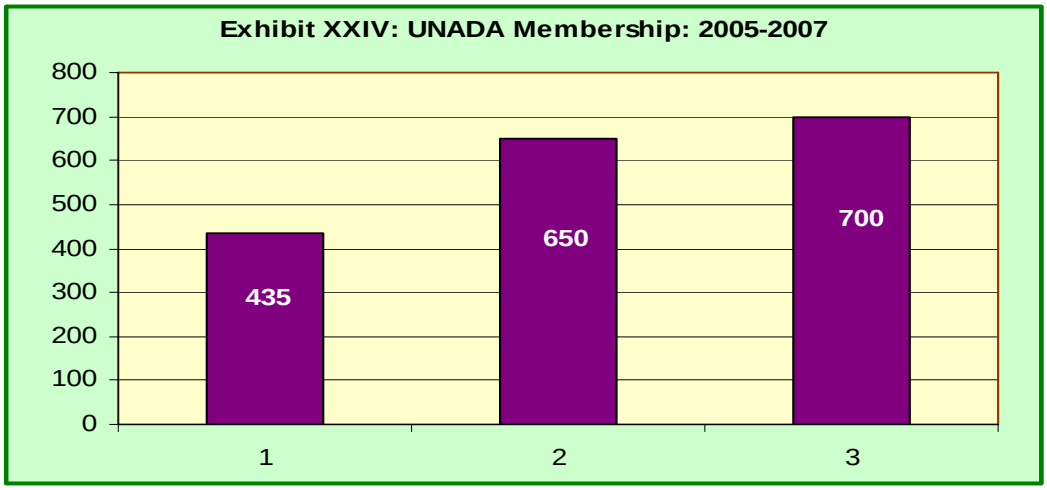
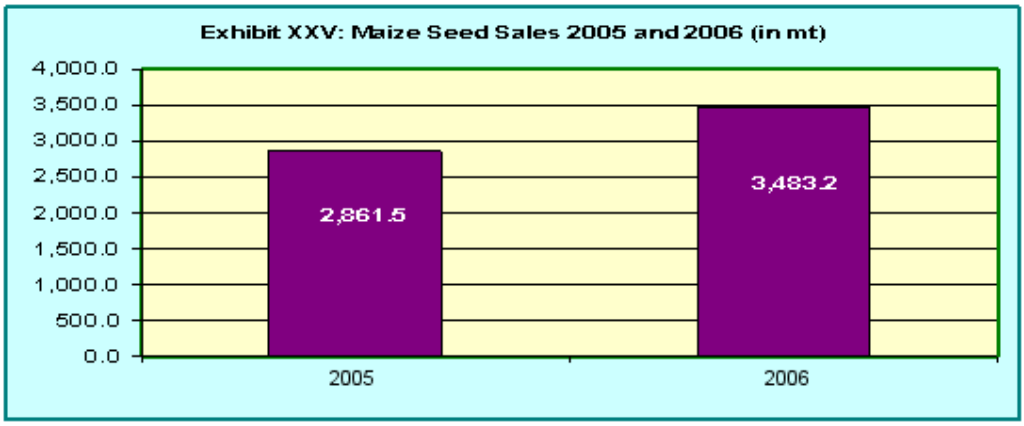



A positive development in the input sub-sector is the seed industry (Exhibit XXV), which has in the recent past been through tough times but with various donor interventions coupled with recent conducive government policies, has eventually been steered in the right direction. The seed industry has been growing stronger and with the formation of USTA (Uganda Seed Traders Association), has led to the development of policies and regulatory systems that guides the industry and also ensures that farmers access good quality improved seeds and associated relevant information.




Josephine Okot of Victoria Seeds was a joint recipient of the YARA prize in recognition of her achievements as a private sector entrepreneur in improving the opportunities for small-scale African farmers. She is also being mentored by the APEP MD under the CGIAR Gender & Diversity Program.

Though challenges still exist, technical, financial, policy and bureaucratic interventions have, together with USAID APEP interventions, contributed to the growth of the input distribution system. There has been an increase in the production/importation and sales of inputs in Uganda. The number and diversity of players has increased significantly and the service delivery to farmers improved. The network of input stockists has also grown in rural areas and the quality of inputs has been enhanced.

## Agricultural Research, Education and Training (REE)

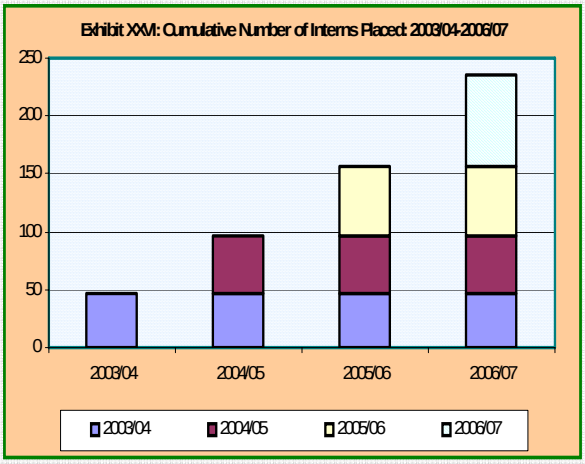
Increasing agricultural productivity entails strengthening institutional weaknesses and challenges in order to add-on and refresh Uganda's reservoir of professional and specialized skills. With the varying degrees of challenging situations faced by the private and public institutions, USAID APEP has promoted technology generation and transfer from research institutes to the farmer fields, strengthened formal and informal education and upgraded the skills and knowledge of the agribusinesses and public sector institutions so as to increase the commercialization of agriculture. The training activities have been demand-driven by both the public and private institutions with increased leveraging of resources with the other development partners like Crop Life and Cochran.

Staff and students of Makerere University as well as those of other institutions from NARO, MAAIF and Agricultural Extension service providers have received support from USAID APEP sponsorship for their MSc and PhD study, exposure to the US universities whereby new innovations and knowledge have been disseminated to better serve the commercially oriented agricultural sector. New linkages for the Makerere University with US universities and other associations have been forged to further their education and leverage the funding for their research. The program has to-date supported a total of 7 MSc students and 4 PhDs in the different agricultural disciplines both at Makerere and in the US as a sandwich program.

A lot of efforts in biotechnology training have advanced to the policy makers, researchers, standards regulators and media reporters so as to develop an in-depth understanding of the subject through study tours to India and South Africa where transgenic products are already in use and genetically modified cotton has been safely grown for many years. Short courses on Biosafety and food safety in collaboration with MSU, PBS and Cochran fellowships have built capacity for Ugandans in research and other institutions so as to improve their expertise and knowledge in biotechnology.

In order to match the job market demands with the quality of graduates able to practically utilize their professional and entrepreneur skills and knowledge in real life situations, with the ability to create jobs and compete favorably in both the private and public employment sectors, USAID APEP in collaboration with Makerere University Faculty of Agriculture has supported the placement of students with agricultural related companies and institutions for practical hands-on experience so as to ensure a more competent work force in the future with the ability to meet the job market demands. To-date 235 students have been placed with various private and public firms/institutions through the USAID APEP internship program (Exhibit XXVI).

Over the life of project, the cumulative number of interns placed has increased from 47 to 236 (18% above target of 200).




There is an increasing acceptance by the companies to train, supervise and expose the students in all aspects of their operations. The demand by the companies for students to be placed at their premises is rising though there is a mixed response by the companies regarding the costs related to the wellbeing of the interns.

Despite the mandatory requirement by the University to have all students examined on the internship course, the students have not embraced the program fully with enthusiasm and commitment which deters their performance at the host firms hence demoralizing the company from participating in the next internship. Though MUFA has institutionalized the field attachment program and is now examinable and contributes to the students' final grades, it still has the challenge of a definite funding once the USAID APEP support ceases. There is a need for the university to identify other sources of funding which might include the private and public sector avenues and some other donors.

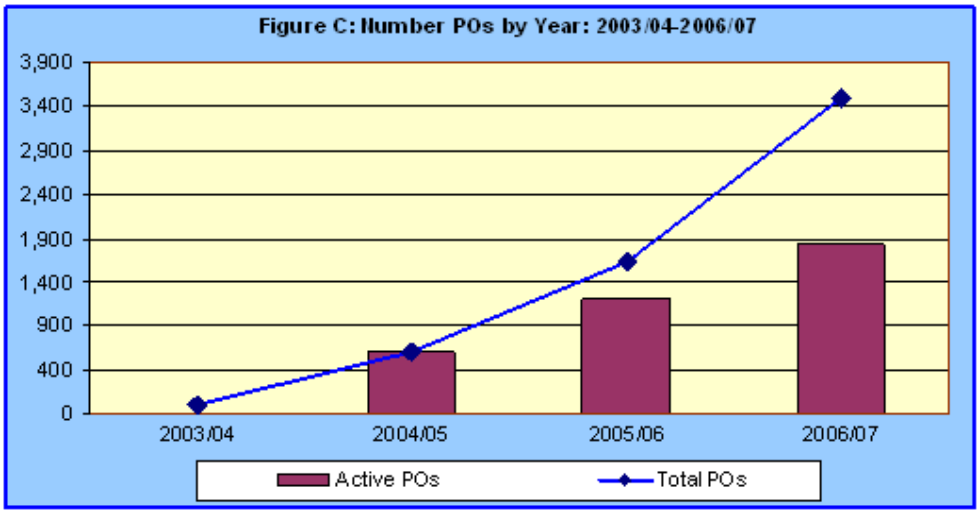
## Producer Organization Strengthening

Over the life of project 3,504 POs have been formed of which 1,823 are relatively strong (Exhibit XXVII) as indicated by their commitment to engage in bulk marketing, bulk input procurement, member education through the demonstration program, keeping business records, internal saving, and sending such information to USAID APEP on a regular basis. Of the 3,504 POs, 1,280 have been established by the corporate partners through their field staff. In this regard PO development activities have been carried out by site coordinators and DC training managers working with corporate partners across the USAID APEP commodity portfolio.

**Exhibit XXVII: Cumulative PO Numbers: 2003/04-2006/07**

| Year | # of DCs | #of POs | Of which # POs by Corporate partners | # of POs that need strengthening | # of Active POs |
|---|---|---|---|---|---|
| 2003/04 | - | 12 | - | - | 12 |
| 2004/05 | 89 | 609 | - | - | 609 |
| 2005/06 | 180 | 1,631 | 534 | 426 | 1,205 |
| 2006/07 | 212 | 3,504 | 1,280 | 1,681 | 1,823 |

Thus, the 1,681 POs that are not yet engaged in all the vital activities need to be strengthened and nurtured to become strong business oriented organizations that are able to do business with serious commodity buyers and agro input suppliers as well as establishing lasting partnerships with technical assistance providers on their own. This is important since the commercialization of POs and their DCs is a critical means towards the development and strengthening of successful outgrower and certification schemes as well as building sustainable business oriented farmer-based organizations. The numbers of POs formed as against the active ones since 2003/04 are shown in Exhibit XXVIII.




Such strengthening will enable POs and DCs build capacity to manage financial and decision-making records, establish an effective internal farmer-to-farmer extension management, building trust and confidence among members, identify additional business opportunities and incentives, foster accountability, and build partnerships with other technical assistance providers such as NAADS, NGOs, NUSAF and CBOs, and strengthen PO and DC business relationships with corporate partners. In addition, all POs and DCs need to be guided to evaluate member commitment and performance, review leadership roles and assess leadership performance, review the PO/DC decision making process, and conduct internal audits of business activities and build transparency and confidence.

# PROGRESS BY PROJECT INTERMEDIATE RESULTS

Overall project progress to-date towards meeting LOP targets are shown in Annex B. The achievements (some of which are as high as 90%-100% of LOP targets) have been made possible by a combination of factors that are highlighted in the sub-sections under the various Project Intermediate Results (PIRs). The sections that follow review progress by objective for the reporting period. Under each objective are the LOP targets and strategies adopted by USAID APEP. These are then followed by a narrative of each benchmark (highlighted in a box) under a specific objective. Against each benchmark is an overall rating of achievement to-date (given as % of the annual target).

## A. PIR 1. Increased Enterprise Efficiencies

*LOP 600 new off-farm enterprises*
*LOP 60% change in the total gross revenue received by off-farm enterprises*

An important strategy to achieving the overall USAID APEP goal is working with enterprises to increase their capabilities to support commercialization and participation in commercialization of agricultural commodities. PIR 1 is designed to address this part of the commodity chain. Objectives 1 to 4 are designed to generate results that contribute to the achievement of this PIR. Most off-farm enterprises created comprise process and aggregation functions. This generally involves small enterprises close to the farmer at the producer organization level or slightly higher. For some commodities such as rice and cotton, processing enterprises are created at the highest level.

### Objective 1: Expand Access to Agribusiness Services

*LOP 400 Input suppliers providing services to USAID APEP supported farmers and groups*
*LOP 30 Local credit service points providing commercial agriculture credit established*
*LOP 45% Change in total amount of commercial agriculture credit provided*

- ***Strategy:*** Increased access to agribusiness services, including input delivery and financial services, implies working on both the supply and demand sides. During the period under review, USAID APEP worked with individual farmers and farmer groups to promote increased use of and demand for appropriate services and inputs. USAID APEP also worked with service providers to improve their capability to deliver quality services to clients. Activities in regard to improving access to rural finance as well as support to structured trade finance opportunities continued to be emphasized through commercial farmer associations, producer organizations, and their depot committees. Support to the emerging agri-input dealers network, UNADA as well as the seed industry continued to reinforce the sustainability of the input sub-sector. Emphasis was placed on corporate partners who have adopted the extension methodology of the project to ensure that they are able to continue at least the core of the partnership activity in the absence of direct USAID APEP TA following the project close out.

  The challenges regarding expanding access to agribusiness services revolve around the basic issue of stimulating a critical mass of commercial farmers. These farmers must be in a position to demand and effectively utilize the agribusiness services provided. This applies equally to the supply of inputs through stockist outlets and to financial services provided by rural financial service providers. If an individual farmer is not commercialized in terms of production efficiency he/she is unlikely to be able to utilize inputs effectively and therefore will not be producing at a level required to service debt of any kind. It is also critically important that sufficient number of growers be stimulated to demand services in a concentrated area. This will drive efficient business for the service providers.

The key to the mobilization is producer confidence. This is driven by a combination of farm gate price, production efficiency and market linkages. These are dependant on support to all levels of the value chain – corporate, input supply, producer organizations as well as the individual farmers. Without attention to all these in parallel, it is unlikely that agribusiness services will expand.

| | |
|---|---|
| ***Benchmark 1.1:*** | At least 100 new input supply stockists (cumulative 400) trained and linked to suppliers by 9/30/2007<br>*~ 99 new input supply stockists (cumulative 497) trained and linked to suppliers and distributors (99%of annual target and 124% of cumulative target accomplished).* |

During the period under review, stockist development was concentrated in the banana/coffee growing areas because it had been realized that use of improved inputs was still relatively low among these farmers compared to, say, those growing annual food crops, yet the marginal rates of return are very high. Through intensified training by USAID APEP commodity specialists and collaborating extension workers, the demand for inputs has increased to an extent that required project intervention in developing input supply systems in these areas to improve accessibility. A series of training events were held involving a few rural-based individuals who had expressed interest in the inputs business, depot committee members, lead farmers, and other potential stockists. Of the 341 trained, 99 have developed into stockists and have been successfully linked to input suppliers and distributors.

In addition to the USAID APEP trainings, there were two other training series conducted in collaboration with some of USAID APEP partners. In October 2006, trainings were conducted in Soroti, Lira, Nebbi and Arua, in collaboration with UNFFE and the District Farmers Associations. These training events were funded by the Royal Netherlands Embassy (RNE). A total of 145 potential new stockists were trained. In December 2006, training was conducted in Moyo and Lira, involving 52 stockists in ASPSII Voucher Program areas. This is an advanced course in business management to develop the capacity of established stockists participating in the voucher program. It was sponsored by UNADA in collaboration with AT Uganda.

| | |
|---|---|
| ***Benchmark 1.2*:** | At least 12 agri-input stockist monthly newsletters (cumulative 33) produced and distributed by 9/30/2007<br>*~ 12 agri-input stockist monthly newsletters produced and distributed (100% accomplished).* |

This activity progresses smoothly with 12 newsletters printed and distributed on a monthly basis. There is growing interest in the newsletter and stakeholders regard it as providing useful information. One of the key challenges is how to achieve more widespread dissemination in rural areas for the benefit of rural stockists.

USAID APEP has been liaising with the Uganda Agri-input Dealers' Association (UNADA) in dissemination of the newsletter but now UNADA is planning to start a quarterly newsletter of its own. Negotiations are going on to undertake a joint newsletter with UNADA with a view to having UNADA completely take over this activity as USAID APEP winds up. This will ensure sustainability of this crucial market service.

***Benchmark 1.3*:** At least 5 new agricultural financial service provider branches (cumulative 32) providing services to USAID APEP clients by 9/30/2007

*~ 5 new (cumulative 33) financial service provider branches providing services to APEP clients (100% of annual target and 103% of cumulative target accomplished).*

Five new financial service outlets commenced lending to USAID APEP clients during the reporting period in addition to the cumulative 28 financial service points as of end of the last reporting period. Thus in total, 33 financial service provider outlets were involved in providing financial services to USAID APEP clients during the period under review.

The 5 outlets are: CERUDEB Fort Portal and CERUDEB Gulu with rice production credit, and CMF Pallisa with Upland rice production lending in Kabarole and Bukedea districts respectively; Bank of Africa with trade finance to Victoria Seeds and Bank of Baroda with trade finance to General and Allied. Description of the different types of financial services offered at all the 33 cumulative service points is provided below. This includes Stanbic Kapchorwa Branch which provided Warehouse Receipt Maize Grain financing to KACOFA., with assistance from USAID Rural SPEED. This facility is currently inactive pending resumption of similar maize warehouse receipt trade by KACOFA.

- **Production Credit:** (20 Outlets) In addition to 12 branches of CERUDEB, Standard Chartered Bank, and 2 SOMED branches; Uganda Breweries Ltd (UBL) and CN Cotton, 3 new outlets of CERUDEB Fort Portal and Gulu, and CMF Pallisa commenced lending to USAID APEP Upland rice farmers in the districts of Kabarole, Gulu and Bukedea respectively during the reporting period. With the training and deployment of new agricultural loans officers, 3 new CERUDEB branches of Arua, Nebbi, and Wakiso are similarly expected to commence agricultural production lending in the near future.

- **Trade Finance Credit**: (4 service points) In addition to DFCU Bank and Stanbic Bank in Kampala, Bank of Africa and Bank of Baroda extended trade finance facilities to USAID APEP Agro-inputs clients; Victoria Seeds, General and Allied and Keith Associates, guaranteed by USAID APEP using PL-480 funds.

- **Agro-input Credit**: (7 service points). Seven registered inputs suppliers continue to extend credit to stockists serving USAID APEP farmers countrywide under the USAID APEP managed UNADA Stockist Credit Scheme that is guaranteed using PL-480/ATAIN funds. These are: Agriserve Ltd; East Africa Seeds; Evergreen Int. FICA; General and Allied; Mt Elgon Seed Co.; and Victoria Seed Ltd.

- **Agro-Equipment Leasing:** (1 outlet) USAID-APEP initiated and developed the leasing business plan for Agricultural Equipment for Kapchorwa farmers with DFCU Bank Mbale Branch with guarantee support from ASPSII/DANIDA.

***Benchmark 1.4:*** At least US$1,500,000 in agricultural credit extended to USAID APEP small holder clients by 9/30/2007

*~ US$2,594,949 in agricultural production credit extended to 5,228 USAID APEP clients (150% accomplished).*

The equivalent of US$2,594,949 was loaned to 5,228 small holder farmers during the reporting period. The loan amount, lenders and the number of beneficiaries are highlighted in Exhibit XXIX below.

**Exhibit XXIX: Agricultural Credit from October 2006 to March 2007**

| | Branch | Districts | No. of Loans | Females | Males | Total Amount (USh) |
|---|---|---|---|---|---|---|
| 1 | CERUDEB Mbale | Kapchorwa, Mbale, Sironko, Butaleja, Bukedea | 625 | 94 | 531 | 1,089,793,000 |
| 2 | CERUDEB Hoima | Hoima, Masindi, Kibaale | 179 | 24 | 155 | 149,688,000 |
| 3 | CERUDEB Kasese | Kasese, Kamwenge | 72 | 21 | 51 | 53,012,000 |
| 4 | CERUDEB Mityana | Mityana, Mubende, Kiboga | 85 | 18 | 67 | 126,551,000 |
| | CERUDEB Kiboga | Kiboga | 102 | 19 | 83 | 96,455,000 |
| 5 | CERUDEB Kyotera | Rakai | 214 | 37 | 177 | 148,571,000 |
| 6 | CERUDEB Tororo | Tororo, Busia | 89 | 0 | 89 | 35,610,000 |
| 7 | CERUDEB Lira | Lira, Apac | 141 | 12 | 129 | 163,921,000 |
| 8 | CERUDEB Bugiri | Bugiri, Iganga | 69 | 13 | 56 | 177,993,000 |
| 9 | CERUDEB Mbarara | Mbarara | 468 | 102 | 366 | 445,845,000 |
| 10 | CERUDEB Kyenjojo | Kyenjojo | 117 | 9 | 108 | 89,704,000 |
| 11 | CERUDEB Ishaka | Bushenyi | 294 | 52 | 242 | 268,590,000 |
| 12 | CERUDEB Fort Portal | Kabarole | 49 | 0 | 49 | 73,500,000 |
| 13 | CERUDEB Gulu | Gulu | 31 | 0 | 31 | 37,773,000 |
| 14 | SCB | Kapchorwa | 3 | 0 | 3 | 51,000,000 |
| 15 | SOMED Masindi | Masindi | 364 | 63 | 301 | 83,720,000 |
| 16 | SOMED Hoima | Hoima | 515 | 84 | 431 | 118,335,000 |
| 17 | CMF (Pallisa) | | 44 | 11 | 33 | 40,500,000 |
| 18 | Uganda Breweries Ltd | Kapchorwa | 2,112 | 601 | 1511 | 1,223,700,000 |
| 19 | CN Cotton | Bukedea/Kumi | 300 | 85 | 815 | 15,000,000 |
| | **TOTAL** | | **5,873** | **1,245** | **5,228** | **4,489,261,000** |
| | **US$ Equivalent (1 USD= USh 1,730)** | | | | | **USD** 2,594,949 |

***Benchmark 1.5*:** At least 3 banks supported to provide structured trade finance to grain traders by 9/30/2007
*~ 2 banks supported (67% accomplished).*

In addition to technical support to Stanbic Bank for the KACOFA Maize Warehouse Receipt Financing Facility during the last reporting period, USAID APEP provided technical assistance including linking the ASPSII/DANIDA guarantee to the Bank of Africa for the purchase and sale of barley to Uganda Breweries Ltd by KACOFA.

***Benchmark 1.6*:** At least 5,000 ha cotton seed produced by the private sector by 9/30/2007
*~ 4,500 ha harvested (90% achieved)*

In the 2006/07 cotton crop season, USAID APEP worked closely with CDO and Quton Seed Company to support production of seed cotton in the Seed Multiplication Segregated areas located in each of the 8 cotton production zones. USAID APEP supported the establishment

of 630 demonstration sites (equals 630 acres) resulting in a total production of 461,215 kg (of seed cotton of BPA 2002 variety) and an average yield of 732 kg per acre (equivalent to 300 mt of cotton seed). This represented 14% of the total seed cotton produced from the Seed Multiplication Areas (3,327,186 kg - ACE Report as at 04/01/07).

This current season of 2007/08, CDO and Quton Seed Company planned to produce 17,200 acres (7,000 Ha) of BPA 2002 variety in the areas of Mid Western, Western, West Nile, Northern Uganda and Teso regions. To-date 18,560 acres of seed have been planted (Exhibit XXX).

**Exhibit XXX: Area Planted under Cotton Seed for 2007/08 Season**

| Region | Ginneries | Acres Proposed | Acres Planted | Demo Plots | No. Trained |
|---|---|---|---|---|---|
| Mid Western | Western | 5,000 | 4,467 | 250 | 36 |
| | Olam | 4,000 | 4,000 | 73 | 8 |
| Western | Nyakatonzi | 2,100 | 3,793 | 200 | 20 |
| West Nile | Copcot EA | 2,100 | 900 | 200 | 20 |
| Northern | Dunavant | 4,000 | 5,400 | 250 | 25 |
| | | **17,200** | **18,560** | **973** | **109** |

USAID APEP continued to provide technical assistance to 109 site coordinators or field assistants through 973 USAID APEP supported existing demonstration sites in the seed multiplication segregated areas. With a total support of 2,690 demonstrations plots in the entire cotton sector, 973 demonstration plots in the cotton seed areas represents 36%, an improvement of 22% form last year's contribution of 14%.

Technical advice in USAID APEP supported demonstration sites relate to appropriate seed production techniques to improve on the quality of seed produced and foster an introduction of appropriate seed dressings to protect the crop from early pest infestation and thus improve on seed viability in the 2008/09 planting season. Seed delivered to farmers in the seed multiplication segregated areas was dressed with Cruiser®.

***Benchmark 1.7*:** At least 5 input suppliers receive credit guarantee support by 9/30/2007
*~4 Suppliers receiving support (80% accomplished)*

Although four companies received credit guarantee support during the reporting period, one of them actually received two different guarantees. Keith Associates received an import financing support through DFCU Bank and a letter of guarantee directly to Aryster Life Sciences, based in Nairobi, specifically for the importation of Satunil®. The other companies that received guarantee support were Victoria Seeds, FICA Seeds and General and Allied. Victoria Seeds, through Bank of Africa, received trade finance support for the purchase of seed produced by contract farmers. FICA Seeds received import finance support for the importation of fertilizers from MEA Ltd of Kenya, and General and Allied through Bank of Baroda received trade finance support for fertilizer imports from Kenya.

***Benchmark 1.8*:** At least 100 rural stockists receive guarantee support by 9/30/2007
*~ 90 rural stockists receive credit guarantee support (90% accomplished)*

The credit guarantee scheme for rural stockists is managed in collaboration with UNADA, the agri-input dealers' association. Because of the small scale nature of these stockists as

well as the need to provide loan security through group guarantees, the scheme is run in groups called Branches.

During the reporting period, 13 branches, each with 5 members, accessed credit, totaling USh123 million as shown in Exhibit XXXI below.

**Exhibit XXXI: 2007 Credit Guarantee Support to Rural Stockists**

| Branch | District | LPO Value | Credit Guarantee < 50% | No. of Stockists benefited |
|---|---|---|---|---|
| Busongora South | Kasese | 6,190,000 | 3,095,000 | 1 |
| Kaliro | Iganga | 12,636,000 | 6,318,000 | 2 |
| Kamuli | Kamuli | 11,000,000 | 5,500,000 | 1 |
| Kibuyi | Nakasongola | 24,029,500 | 1,013,500 | 12 |
| Kongasis | Bukwo | 61,686,400 | 27,289,700 | 13 |
| KWEEN | Kapchorwa | 62,038,800 | 31,029,250 | 7 |
| Mako | Koboko | 1,000,000 | 500,000 | 1 |
| Mityana T.C. | Mityana | 19,635,000 | 9,817,500 | 10 |
| Mubende Central | Mubende | 1,360,000 | 490,000 | 1 |
| Nyabirerema | Kabale | 5,187,000 | 2,593,500 | 2 |
| Parombo | Nebbi | 1,000,000 | 500,000 | 1 |
| Sukuya | Manafwa | 4,153,900 | 1,605,850 | 20 |
| Tingey | Kapchorwa | 61,525,800 | 30,054,250 | 11 |
| Wagagai | Sironko | 6,617,300 | 3,308,650 | 8 |
| **TOTAL** | | **278,059,700** | **123,115,200** | **90** |

***Benchmark 1.9*:** At least $100,000 in agricultural credit extended to coffee farmers by 9/30/2007

*~$53,000 in agricultural credit extended to coffee farmers (51% accomplished)*

During the reporting period the loan guarantee from the Rockefeller Foundation for banana lending was extended to coffee production by virtue of the inherent and compatible Banana/Coffee farming system in Bushenyi district. One third ($53,000) of the total agricultural lending portfolio (US$160,000) of CERUDEB Ishaka was disbursed for coffee production. This rather low level of accomplishment is attributed to priority being given to banana enterprises due to its higher profitability and regular cash flow compared to coffee.

***Benchmark 1.10*:** Vanilla extension support continues to be provided in at least 3 regions by 9/30/2007

*~ Extension support provided in three regions (100% accomplished,).*

Through the SAF, VANEX continued to provide extension services in three regions namely the Central (Mukono/Kayunga, Mpigi/Wakiso/Luweero Masaka/Rakai), the Eastern (Busoga and Mbale), and the Western (Kabarole/Kasese/Kyenjojo/Mubende and Bundibugyo) regions. The weekly radio programs on 3 Radio stations and the extension services at the 60 demonstration plots were maintained. During the reporting period, a total of 144 radio

programs were aired on three radio stations namely Central Broadcasting Service (CBS), Voice of Toro (VOT) and Kiira FM Radio.

## Objective 2: Increase Access to Markets

*LOP 50 Agribusiness enterprises engaged in processing*
*LOP 100% Change in the total value of products after processing*
*LOP 40 Firms involved in regional and international exports of agricultural products*

- ***Strategy***: The strategy for this objective remained essentially unchanged during this reporting period. This objective focuses on strengthening and developing competitive marketing strategies so that Uganda's products reach local, regional and international markets. Improved efficiency interventions focused on:
  - productivity at the farm-level;
  - quality at the farm or business levels; and
  - organizational efficiencies.

  The approach adopted was to link established groups of producers more directly with markets where possible, develop and implement grades and standards and ensure that producer incentives were realized to sustain efforts to improve quality and quantity delivered to market. In addition to farm level support, the strategy sought to promote better quality, traceability and reliability from the farm level in order to service markets better.

  Work continued with exporter clients to enable them meet requirements in the regional and international markets. Improved reliability of both supply and quality encourages internal terminal markets and processors to develop improved regional market opportunities. This has shown particular promise in the oilseed sub-sector where enhanced regional market penetration has resulted in improved regional penetration for the terminal processor. A list of active clients USAID APEP worked with during the reporting period is shown in Annex C.

  Access to market at the firm level depends specifically on the reliability with which firms can access quality commodities at competitive prices. This clearly reflects back to production efficiencies at the farm level as well as the efficiencies of the mechanisms both for technology dissemination as well as commodity procurement. Market access has been improved markedly where *the complete value chain* has received adequate attention.

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| ***Benchmark 2.1*:** | Technical and market linkage support provided to at least 7 new agro-processors (cumulative 45) by 9/30/2007.<br>*~ 9 firms supported (128 % achieved)* |

The cotton sub-sector suffered a setback in the 2006/07 cotton season with excessive rainfall during November 2006 through January 2007 caused by a minor El Niño occurrence. This had a devastating effect on crop yields and quality especially for later planted crops. Despite these, there were a number of new investments in a number of sub-sectors. USAID APEP continued to support Mutuma Ginnery resulting in the completion of a new ginnery with 22 roller gin stands. In addition, Lukhonge Ginnery has been active in Manafwa district and although operating at less than 20% of capacity, is set to continue supporting producers in the district by offering production support and ginning services. Twin Brothers Ginnery in the Lango sub-region has established a new ginning unit in Lira with 30 roller gin stands. In addition this unit will have installed capacity of 50 mt cotton seed processing per day, enabling all the seed derived from a full day's ginning to be processed for crude oil

extraction. OLAM has recently purchased the Magnetic ginnery in Hoima and continues to receive both technical and market linkage support.

The upland rice sub-sector has continued to receive new investors requiring market linkage and technical support. USAID APEP has mediated the formation of a rice processors association to support these activities after closure of the project in 2008.

Rwenzori Rice in Fort Portal with rice milling capacity of 60 mt per day, Kilimanjoro Millers in Kampala with 30 mt per day capacity as well as Nyati Millers in Hoima (not a new agro-processor) with a new processing facility all received both technical and market linkage support over the reporting period. SOMED in Masindi and Mulindwa Millers in Iganga installed new rice milling capacity over the reporting period with USAID APEP providing technical and marketing linkage support.

Mukwano Agro Projects (A.K. Oils and Fats) has installed a new 80 mt per day (approximately 30,000 mt per annum) oil mill in Lira as a direct result of USAID APEP intervention in sunflower production, and to a lesser extent, cotton. The first tanker of oil was shipped from the mill to the refinery in the last week of September 2007. This oil mill is directly linked to producers and will effectively double the capacity of the company to produce crude and refined sunflower and cottonseed oils. This will allow the company to expand its production from approximately 30,000 mt per annum to 60,000 mt per annum. This expansion which represents a potential increase in farm gate value of US$4 million per annum for additional feedstock procured.

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| ***Benchmark 2.2*:** | Technical guidance provided to 3 new agribusiness firms to develop production, sourcing and marketing plans by 9/30/2007<br>*~ 5 firms supported (167% achieved)* |

During the period under review technical support was provided to NUECO, Olam, CopCot, and Dunavant Organic as separate divisions of existing companies. The production packages being developed involve close liaison with international certification bodies, regional, local and international suppliers of organic crop protection chemicals as well as local regulators and policy makers.

In addition, USAID APEP mediated in the cotton industry with a view to resolving internal conflicts within the sub-sector. The established zoning regulations have not functioned well resulting in dissatisfaction and potential disinvestment by some ginners. The poor season exacerbated the flaws in the system. Alternative models of sourcing and production support were developed and presented to UGCEA. The increased interest shown in developing organic cotton in northern Uganda prompted the formation of a new association – Northern Uganda Organic Producers and Processors Association (NUOPPA). USAID APEP TA assisted clients to draw appropriate articles of association and to define the core mission of the association. This association has since inception established its own research farm in Loro with a USAID APEP SAF and support from a USAID APEP consultant involved in providing regular feedback to association members as crop growth and pest pressure is monitored. The objectives of the association are firmly based on the IFOAM principles of Health, Ecology, Fairness and Care. The fairness pillar is particularly important to the association as all members ascribe to the notion that organic production is only feasible if producers are at no disadvantage over conventional producers in terms of income.

Although not considered a firm and not considered in the achievement of this benchmark, technical support continued to be provided to the Uganda Commodity Exchange (UCE) and the warehouse receipts project of the EU. This group has been encouraged to rapidly develop at least one pilot activity as proof of concept and discussions on the likely candidate commodity being upland rice.

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| ***Benchmark 2.3*:** | Coffee sustainability technical and market standards guidance provide to at least 3,000 new smallholders (cumulative 10,000) by 9/30/07<br>*~ Coffee sustainability technical and market standards guidance provided to 3,102 farmers (103% accomplished).* |

The certified sustainable coffee has continued to offer a viable alternative opportunity to differentiate products and achieve sustainable international market access for the coffee industry in Uganda. USAID APEP through both TA and SAF provided technical and financial support to coffee farmer groups and associations and the collaborative exporting coffee enterprises implementing the sustainable coffee initiatives. The objective of the assistance was to make both the enterprise and the coffee farmers effective in meeting the requirements for the certified sustainable coffee. The participating export enterprises included Kawacom (U) Ltd, Ibero (U) Ltd, Kyagalanyi Coffee Ltd, Olam (U) Ltd and Ankole Coffee Processors (ACL) and their associated organized coffee farmer groups and associations located in the districts of Kamuli, Masaka, Luwero, Nakaseke, Bushenyi, Mukono and Ibanda. In total 3,102 new farmers (registered with various coffee exporters) participated in the Utz Kapeh and Fair Trade Initiatives in Ibanda and Bushenyi.

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| ***Benchmark 2.4*:** | At least 10 flower market analysis reports produced by 9/30/2007<br>*~ 7 market reports produced (70% accomplished).* |

USAID APEP continued to financially support UFEA through the SAF, to address research, training and market development areas. With USAID APEP financial support, the Research and Training Specialist at UFEA was facilitated to continue with quality assurance, standards and certification activities on flower farms that are MPS and EUREPGAP compliant. MPS ABC program aims at reducing environmental impact of the floriculture sector. All flower farms except for two, have registered with MPS. Rose trials on local substrate materials at Mellisa and Belflowers were completed. Results indicated Kabale volcanic cinders (stones) as the best locally available substrate and already several flower farms have started using it.

Seven market analysis reports with updates of the industry developments were submitted to USAID APEP by the UFEA Research and Training Specialist. These reports provide monthly information on industry performance and the international market prices.

Export volume of both roses and cuttings during the reporting period were 6,631 tons, with an estimated value of US$31.58 million, showing a decline in volume and value of more than 12% and 9% respectively, as compared to 2005/06 exports. The decline in volume was due to some flower farms reducing rose production and diversification into other products like potted plants/cuttings on top of those that pulled out of rose production (over 30 ha were lost). Furthermore, the prolonged overcast weather conditions affected production by reducing growth rates and also increasing downy mildew attacks leading to significant losses. Therefore many farms could not achieve their Valentine targets although the prices per stem for red roses were very attractive.

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| ***Benchmark 2.5*:** | At least 6 vanilla market analysis reports produced by 9/30/2007<br>*~ 6 market analysis reports produced (100% accomplished).* |

With the support provided by the USAID APEP though the SAF, VANEX produced 6 vanilla market analysis reports. The market analysis reports are produced every two months and

highlight production and productivity of green vanilla beans at farm level, and Uganda's export performance on the international scene. Production figures from processors indicated over 255 tons cured in 2006/07 as compared to 229 tons in 2005/06. Feedback from international buyers like Shanks indicated improvement in the quality of vanilla from Uganda. Reports have also indicated some small volumes of vanilla going out to Fair Trade markets in Europe attracting slightly higher market prices.

During the reporting period, a total of 277 mt cured vanilla were exported, of which 79 tons was by air and 198 mt by less expensive sea freight. It was very evident that the exporters are shifting more to sea freight. International prices for cured vanilla remained low and ranging from US $12-25 per kg. It is estimated that vanilla exports realized about US$4.87 million during the reporting period.

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| ***Benchmark 2.6:*** | The Vanilla Code of Practice incorporated into vanilla training programs by 9/30/2007<br>*~ Vanilla CoP incorporated (100% accomplished).* |

The Code of Practice (CoP) for the vanilla industry lays down requirements for controlling quality in the production and processing chain with the aim of safeguarding the required standards so that Uganda remains a reliable vanilla producer. Implementation of the CoP is an on-going activity. With technical and financial support from USAID APEP, VANEX extension staff continued to train farmers in all aspects of vanilla production as laid down in the Code of Practice. USAID APEP TA together with the VANEX Field Director continued to monitor and verify the performance of demonstration plots. Pre-audit visits were conducted at 10 processing/exporting companies.

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| ***Benchmark 2.7:*** | At least 1 new exporter firm (cumulative 61) assisted by 9/30/2007<br>*~ 1 new exporter firm (cumulative 76) supported (100% of annual and 125% of cumulative accomplished)* |

Organic cotton provided a completely new commodity grouping for the USAID APEP interventions during the reporting period. NUECO has been joined by Dunavant Organic working in Kitgum and Pader districts. This new exporter firm will deal with organic cotton from these two post-conflict production areas and export under the new corporate identity. This firm is being supported by a USAID Global Development Alliance (GDA) grant to assist returning refugees in land opening for both cotton and food crops. In addition to an expansion in organic cotton, organic sesame continues to generate interest and OLAM has entered the market for organic sesame and organic cotton in West Nile. USAID APEP has continued to support this activity by providing TA and direct field assistance through SAF partnerships. Since OLAM was reported previously as a partner firm, this new activity is not considered as an additional export firm but has received dedicated TA and SAF support.

## Objective 3: Identify and Support Producer-Market Alliances

*LOP 25 APEP supported firms managing out grower schemes*
*LOP 125,000 farmers involved in integrated out grower schemes*

- ***Strategy***: This objective has focused on fostering linkages between producers and the rest of the commodity market chain participants. USAID APEP continued to work in two main areas, at the business or large association level, and at the producer level through DC and PO commercialization to build producer-market linkages. Quality standards, buyer requirements, and other market chain support activities

were emphasized. The strategy has focused on individual commodity chains and clusters and linked the various partners in the supply chain in order to forge formal or semi-formal marketing alliances.

Of significance has been the development of a *re-worked strategy* for the rapid development of effective POs. This has opened up the possibility of literally thousands of PO's serving the market requirements. This strategy has been piloted in the cotton sub-sector in Teso and the Tororo zones, with encouraging results. Rapid PO development has been taken to the NUEO organic production system where in a relatively short time, the program has supported the development of 840 PO's. Rapid PO development has also been utilized effectively in West Nile under the OLAM sesame and Sanyu sunflower partnerships. The UBL/EAM partnership in Kapchorwa has seen the development of 100 POs to service the barley producer-market alliance.

It is envisaged that this important development will contribute significantly to the sustainability of the interventions of USAID APEP. POs and their aggregated DCs have shown their ability to continue to function in the absence of donor support both financially and technically. Maize POs formed at the outset of USAID APEP on the back of former IDEA interventions have continued to grow and flourish without financial support or donor involvement. The PO/DC arrangement is fully capable of integrating with the market and developing viable commercial alliances. Sustainability here is dependant on a functioning private sector without donor or GOU distortions. Strategic interventions post-USAID APEP must not ignore this.

The strategic challenge to establishing producer market alliances is to enable the market to realize the benefit of creating alliances with smallholder farmers. This is a linkage which is not traditionally part of the thinking of processing and marketing firms in Uganda. Dealing with smallholder farmers has been fraught with difficulty if not impossibility in the eyes of the corporates.

Presenting creative mechanisms to link with producers is the key. The linkage options presented differ from crop to crop and the management commitment of the company. For crops with multiple channel markets like rice, opportunities are different to those with only a single channel like barley. Whatever the case, opportunity has to be found that brings technology to producers to enable them to improve efficiencies of production while at the same time enabling the corporate to access quality commodity in meaningful volumes. These positions enhance the efficiency of the whole chain providing a commercial environment that is sustainable because it is mutually beneficial. A valuable lesson learned is that producer organizations are a key ingredient. Corporates have begun to rely on them in many commodity groups as added value has been possible at the farm level and corporates have benefited from the consolidated output.

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| ***Benchmark 3.1*:** | At least 20,000 new assisted coffee farmers (cumulative 70,000) linked with coffee exporters by 9/30/2007<br>*~ 10,113 new coffee farmers (cumulative 47,138) have been linked (67% of cumulative total accomplished).* |

During the reporting period USAID APEP provided TA to the collaborative coffee exporting enterprises that included MTL, Ibero (U) Ltd, Olam (U) Ltd, Kawacom (U) Ltd, UNEX, Ankole Coffee Processors, Kaweri Coffee Farmers Alliance Kyagalanyi Coffee Ltd and UGACOF. The focus was on increasing PO coverage while at the same time strengthening the existing established commercially-oriented coffee POs in the districts of Kapchorwa, Bushenyi, Rakai, Masaka, Kamuli, Nakaseke, Ibanda, Mityana Mbale, Iganga Mubende, Mukono while

at the same time rolling over to the districts of Nebbi and Arua. A lot of emphasis was placed on strengthening the PO and DC capacity in quality control as well as hygiene and food safety to prevent the potential production of Ochratoxin. A. (OTA). Through better management and organization, both old and the new POs as well as some societies were able to access improved coffee production technologies and a better market. A total of 10,113 new coffee farmers were linked directly to 7 major coffee exporters, bringing the cumulative total of those linked to about 47,138.

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| ***Benchmark 3.2:*** | At least one training event in specialty coffee conducted in collaboration with USAID RATES and SCAA by 9/30/2007<br>*~ 2 training events conducted in collaboration with USAID RATES and SCAA (200% accomplished)*. |

In order to enable the project to access both regional and global coffee market information, USAID APEP continued to maintain close linkage with RATES and Specialty Coffee of America Association (SCAA). During the reporting period USAID APEP provided financial assistance to Kyagalanyi Coffee Ltd, UGACOF (U) Kawacom (U) Ltd, Ibero (U) Ltd, MTL, Olam (U) Ltd and COREC to improve their coffee cupping evaluation capabilities. In total, nine personnel from the six coffee exporting enterprises and COREC attended a training organized by RATES in conjunction with Coffee Quality Institute (CQI), in Kampala January 17$^{th}$ – 18$^{th}$, 2007. Through USAID APEP support, the COREC coffee breeder attended the 4$^{th}$ African Fine Coffee Conference & Exhibition held in Addis-Ababa, Ethiopia in February 2007. In this same period, USAID APEP TA in collaboration with the coffee exporting enterprises worked on coffee samples and promotional materials in preparation of the 5$^{th}$ Africa Fine Coffee Conference & Exhibition 14$^{th}$ – 16$^{th}$ February 2008, Kampala, Uganda.

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| ***Benchmark 3.3*:** | At least 10,000 new USAID APEP assisted cotton farmers (cumulative 130,000) linked with cotton ginners by 9/30/2007<br>*~ 38,000 new cotton farmers assisted (380% accomplished. New farmers linked refer to the 2007/08 cotton season which commenced in May 2007)* |

As reported in the USAID APEP Third Annual Progress Report (October 2005 through September 2006) a cumulative of 134,458 of both existing conventional and organic cotton farmers were assisted during the 2006/07 cotton season. This current season 2007/08, as a result of unreliable global price trends and an increased demand for organic cotton, USAID APEP assisted 38,000 organic farmers by the Dunavant Organic project in the areas of Pader, Kitgum and Gulu; Most of these farmers are just returning to their homes from IDP camps giving them a window of opportunity to engage in organic cotton production and reap strongly from the premium.

USAID APEP and Dunavant has established 500 demonstration sites (250 demonstration plots each) to provide farmers with a hands-on experience on simple agronomic practices of growing cotton organically embracing an Integrated Ecological Pest Management system. The farmers have already been inspected by a reputable firm in conformity with organic standards, and Dunavant awaits its certification.

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| ***Benchmark 3.4*:** | At least 35,000 existing USAID APEP assisted sunflower farmers engaged with at least 2 sunflower processing firm in OGS by 9/30/2006<br>*~ 33,445 farmers were registered with an OGS linked to 2 sunflower processing firm (96% accomplished)*. |

A total of 34,374 (31,291 with A.K. Oils & Fats (U) Ltd and 3,083 with Sanyu Agro Industries Ltd) collaborating farmers have been registered in the out-grower schemes (OGS) to-date. Of these 14,307 are women (13,358 under A.K. Oils & Fats and 1,212 under Sanyu Agro Industries).

The reporting period witnessed strong collaboration between USAID APEP and A.K. Oils & Fats (U) Ltd in Lira, Apac, Oyam and Masindi districts. A.K. Oils and Fats (U) Ltd procured 27,700 mt of sunflower grain with a farm gate value of USh9.70 billion from 31,291 collaborating farmers. The company together with USAID APEP established an extension system comprising 4 district and 98 site coordinators who were instrumental during the time of registering collaborating farmers and providing technical training to the collaborating farmers.

Another producer-to-market alliance was further developed and strengthened with a relatively new company in the oil milling industry. Sanyu Agro Industries Ltd (SAIL) located in Mukono district has developed an out-growers scheme with 3,083 collaborating farmers registered in Nebbi district. Sanyu made available 1,700 kg of the PAN 7351 hybrid sunflower seed. However, this being a new intervention in the area, only 400 kg of seed was bought by farmers and about 25,625 kg of sunflower grains were procured by Sanyu Agro Industries Ltd resulting in an income of USh8.97 million to the collaborating farmers. The company together with USAID APEP established an extension system comprising 2 zone and 6 Depot Committee Training Coordinators who coordinated the registration of collaborating farmers in the OGS.

USAID APEP provided a series of comprehensive technical trainings to all the coordinators in the 2 OGS to equip them with the necessary skills and techniques of transferring improved production and post-harvest handling practices to the farmers during the season. At the same time, the coordinators were the ones who played a leading role together with lead farmers in the procurement of sunflower grain from the farmers at the rural cluster centers. The rural cluster centers generally serve as sources of technical and market information; and input distribution points and marketing/bulking stores.

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| ***Benchmark 3.5*:** | At least 60 sunflower rural buying centers established under USAID APEP-Mukwano partnership by 9/30/2007<br>*~ 98 buying centres established (163% accomplished)*. |

In collaboration with USAID APEP, A.K. Oils & Fats (U) Ltd established 98 rural cluster centers in Lira, Apac, Oyam and Masindi districts. The centers served farmers registered in the OGS as a source of technical and market information, training facilities and for input distribution and output procurement. Each center was managed by a site coordinator who worked closely through lead farmers in delivering services to collaborating farmers.

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| ***Benchmark 3.6*:** | At least 12,000 existing USAID APEP assisted sesame farmers engaged with at least 4 sesame exporting firms by 9/30/2007<br>*~ 11,318 farmers directly engaged with 4 sesame exporting firms through USAID APEP interventions (94% accomplished*) |

USAID APEP worked with Outspan Enterprises Ltd to establish an OGS with about 20,000 out-growers registered under an umbrella company known as Northern Uganda Eco Organic Ltd (NUECO). During the reporting period the company procured 400 mt of organic sesame with a farm-gate value of USh441 million. USAID APEP also worked with Shares! (U) Ltd through Lango Organic Farming Promotion (LOFP), a local NGO, that recently achieved organic certification and is now an independent provider of organic produce (cotton and sesame) to the market. Shares! (U) Ltd procured a total of 1,000 mt of sesame with a farm-gate value of USh1.15 billion during the season 2006B.

Further collaboration between CARE Uganda - an International NGO - and Olam (U) Ltd in the in the West Nile sub-region, with USAID APEP TA providing the field training activity and technical oversight, as well as linking, where possible, to the off-take markets and supporting demonstration supervision allowances. Total product delivery to UNO Trading Co. over the season was 400 mt of sesame with a farm-gate value of USh400 million.

In total, 11,318 sesame farmers were actively engaged with 4 sesame exporting firms during the reporting period.

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| ***Benchmark 3.7*:** | At least 1,000 new USAID APEP assisted seed growers (cumulative 5,000) linked with 5 seed marketing firms and cotton ginners by 9/30/2007<br>*~ 1,400 new growers recruited in Masindi for the production of cotton seed (140% accomplished).* |

*A young cotton crop at Kigumba farm*

During the reporting period, USAID APEP worked closely with FICA Seeds in an endeavor to have a critical mass of seed growers. FICA Seeds has expanded into the production of cotton seed following changes in the policy in the cotton sub-sector. The company was leased the NARO farm at Kigumba, previously used by Cotco which closed its activities in Uganda. The other part of the farm is utilized by FICA itself. The company has also recruited about 1,400 farmers in three sub-counties surrounding the farm. While the screening of these farmers is still going on, the strategy is to limit the crop size per farmer to around 1.0 acre for ease of management and quality control. Ordinarily, seed production is demanding, but the production of cotton seed is particularly challenging.

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| ***Benchmark 3.8*:** | At least 2,500 barley producers linked with 1 agribusiness firm through 1 intermediary by 9/30/2007<br>*~ 4,100 barley producers linked (164% accomplished).* |

The 2006B season witnessed further collaboration between Uganda Breweries Limited (UBL) and USAID APEP through the SAF program for the production of barley in Kapchorwa district. The program expanded into Bukwo district and a total of 3,100 and 1,000 collaborating farmers were registered in the OGS in Kapchorwa and Bukwo districts respectively. UBL procured 1,050 mt with a farm-gate value of USh420 million.

About 187,000 kg (Karne and Sabini varieties) of imported seed was sold on credit to collaborating farmers for planting during the 2006B and 2007A seasons. This was estimated to establish approximately 3,750 acres, from which UBL/EAML procured 1,050 mt of grain. This translates into an average yield of less than 300kg/acre of barley, which is not economically sustainable for farmers.

UBL in conjunction with Kapchorwa Commercial Farmers Association Produce Handling Agency (Kapchorwa district) and Sebei Cereals Farmers Association (Bukwo district), continued to provide a full range of support services to the collaborating farmers registered in their respective OGSs using the USAID APEP extension model.

## Objective 4: Increased Investment in Private Sector Agriculture

*LOP US$6,000,000 in resources leveraged by USAID APEP*
*LOP 125 Public/Private partnership developed by USAID APEP*

- ***Strategy***: This objective involves activities supporting investment in private sector agriculture. Over the life of project, USAID APEP continued to provide the catalyst to such investments, promoting and actively seeking out opportunities for investment in the selected commodity sub-sectors. The bulk of the leveraged investment continued to come through the SAF partnership where partners, stimulated by SAF support, invest their own resources. USAID APEP TA continuously sought out viable investment opportunities in each intervention sub-sector. These investment opportunities were clearly and simply documented to provide a template for private sector intervention. At the same time, USAID APEP has also counseled potential investors on bad deals and/or bad partners.

  USAID APEP TA worked with each investor not only in the initial investment decision-making process but also throughout the process of implementation and development to bring added comfort to the process and help reduce investment risk, perceived or real. This involved working closely with firms, financial institutions, technical service providers and international markets. A modified strategy was adopted this reporting period, where USAID APEP TA increased their role as leveraging agents with other donors and partners. NAADS, the Royal Netherlands Embassy, UNDP through A2N and DANIDA/ASPS II continued to be valuable partners. Such support is intended to leverage the technical support provided by USAID APEP and in addition reinforces the sustainability of the USAID APEP initiated work in that such support is likely to continue after the close of USAID APEP in 2008.

  Experience over the reporting period has highlighted the challenges in leveraging resources from and through other institutions. Institutions may well have the desire to provide financial support, but bureaucratic and administrative differences make timing and delivery difficult. Additionally, most NGOs and associations seem to have a "self first" mandate where any financial support to the sector will first have to support the institution itself before funds flow to farmers and for corporate linkage development. This results in delays and issues of implementation.

  Private sector investment, however, flows seamlessly to the task at hand since it is in the corporates' core interest. Herein lies the solution to supporting and stimulating the private sector – encourage other donors who have a genuine interest in working with these programs to support directly the private institutions as USAID APEP has consistently done. There seems to be no shortage of real private sector investment once the development and promotion systems are in place and convincing. USAID APEP has achieved a *real cash* leverage of 2.2:1 (after removing the new flower intervention from the figures as a distortion) over the project life. This sort of

investment gain is set to continue should economic growth be part of the USAID strategy in the years to come post-USAID APEP.

The reporting period witnessed 2 businesses wind up activities. UGTL was faced with reduced volumes of turnover and high facility rental costs in Nakawa and the shareholders decided to voluntarily liquidate the business. Olam (U) Ltd ceased direct coffee trading in Uganda. Olam continues to be an international trader in Uganda coffee and other commodities (cotton, sesame, etc).

| | |
|---|---|
| ***Benchmark 4.1*:** | At least 2 new investments (cumulative 8) in the coffee sub-sector in place by 9/30/2007<br>~ 2 *new investments in place (100% accomplished)* |

USAID APEP in collaboration with the coffee industry has continued to support the promotion of value-added green coffee through central pulping stations. USAID APEP continued to provide financial and technical assistance support to MTL, Ankole Coffee Processors (ACL), Kawacom (U) Ltd and UGACOF to increase yields and improved quality as well as a better cherry collection system from farmers. Further financial support was provided for the completion and commissioning of Kawacom (U) Ltd in Ishaka, Bushenyi which delayed due non-availability of 3-Phase electricity. This structural change from dried to wet processing will contribute to increased production and export of washed Robusta. Furthermore, USAID APEP, through a SAF, facilitated MTL in the installation of a new artificial coffee dryer to increase the wet parchment drying capability to mitigate the effect of unpredictable wet weather that generally adversely affect the quality of coffee during the months of November and December. The installation and testing of the artificial dryer in Mbale is completed but not yet fully operational due to a seasonality factor that, has delayed cherry ripening and harvesting.

| | |
|---|---|
| ***Benchmark 4.2*:** | At least 2 new investments (cumulative 6) in the cotton sub-sector in place by 9/30/2007<br>*~ 2 new investments in place (100% accomplished).* |

USAID APEP interventions in close cooperation with ginners and support from RNE and NAADS have continued to attract investments in the cotton sub-sector. During the reporting period, there were 2 new investments in the cotton industry.

Twin Brothers set up in Lira district, a ginnery and oil mill with installation of 30 gin stands and 5 oil extractors with an output capacity of 5 metric tons of oil per day. The investment is worth approximately US$400,000.

Mutuma Commercial Agencies in Kiyunga, Iganga district made investment in the oil sub-sector with an oil mill with 4 oil extractors, each with a capacity of 7 tons per day. The ginnery was overhauled with replacement of old equipment and a generator. The machines were test run, and are operating at full capacity. The investment is worth US$581,700.

Investments of this magnitude indicate a renewed confidence in the cotton sub-sector with improved business opportunities that investors have appreciated and are more than willing to expand their business horizons.

| | |
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| ***Benchmark 4.3*:** | At least 3 new investments (cumulative 7) in the grains sub-sector in place by 9/30/2007<br>*~ Two new investments in the rice sub-sector (67% accomplished).* |

The expansion of rice production must be accompanied by an industry wide commitment to quality and as such investments in the grains sub-sector continued to centre on rice with two new investments: Mz. Okello James in Pallisa and Quality Millers in Mukono. During the period under review USAID APEP provided TA support to 10 rice processing companies in paddy sourcing, financial linkages, developing a business plan, quality processing and market linkage.

| | |
|---|---|
| ***Benchmark 4.4*:** | At least 1 new investment (cumulative 3) in the agri-inputs sub-sector in place by 9/30/2007<br>*~ 1 new investment in the agri-input sector established (cumulative 3, 100% accomplished).* |

Most of the local seed companies have made sizeable investments in their businesses in the form of land, production and processing equipment. USAID APEP has had no monetary input in these investments but the USAID APEP Input Specialist maintained close working relationships with the companies offering technical support whenever possible.

One major investment in the industry during the reporting period was the construction of a warehouse, with stores, offices, and a room for processing equipment. There are also fields for trials and early generation seed production. This facility constructed in Atiak, Gulu District by Victoria Seeds is intended to become a major field production and processing facility for vegetable seeds and maize. It is poised to service Northern Uganda and Southern Sudan as primary markets.

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|---|---|
| ***Benchmark 4.5*:** | At least 1 new investment (cumulative 3) in the flowers sub-sector in place by 9/30/2007<br>*~ 0% accomplished (no new investment in the flowers sector)* |

During the reporting period, there was no new investment supported by USAID APEP. However, some farms continued with diversification and expansion into potted plants. Pearl Flowers continued with its expansion and diversification into high altitude rose growing. A total of 10 hectares were planted of which 6 came into full production. Construction of stores, fertigation unit, cold chain facilities, and packing station were completed. Quality remarks from the market indicated better quality flowers with longer stems and bigger head size fetching higher per-stem price.

Overall, the flowers and cuttings industry is under severe constraints. Ethiopia has a very attractive investment package for the flowers sub-sector that is rapidly expanding with local and foreign investors, and is very competitive. Uganda continues to be plagued by high energy costs and power shedding (resulting in high airfreight rates and high costs of generating electricity) and the once thriving industry has stagnated.

## PIR 2. Increased On-Farm Productivity

*LOP 33% change in value per unit of targeted commodities marketed*

Another important pre-requisite to achieving the project sub-objective of increased commercialization of targeted commodities is the transformation of a significant number of Ugandan farmers from subsistence farming to profitable commercial enterprises. The aim is to blend all the elements that support PO/DC development including crop productivity enhancement, organizational strengthening, and market linkages. Production and marketing efficiency increases are important to sustain this transformation. They may be obtained in a number of ways, including productivity or yield increases through improved farming practices and proper application of appropriate inputs; product cost reductions through better planning and organization to achieve economies of scale; improved quality of commodities; bulk marketing activities that enable farmers to benefit from economies of scale; and added value through improved harvest and post-harvest techniques and product transformation. Organizational strengthening is aimed at guiding POs to ensure good governance through democratic leadership and decision making, transparency and accountability.

Objectives 5 and 6 are designed to generate results that contribute to the achievement of PIR 2.

## Objective 5: Strengthen and Develop Producer Organizations

*LOP 200 Depot Committees developed and strengthened*

- ***Strategy*:** USAID APEP PO development and strengthening strategy has focused on addressing the key weaknesses and constraints facing Producer Organizations (POs) and their secondary tier Depot Committees (DCs). These include lack of organizational, planning and managerial skills, lack of a commercial orientation and business skills, lack of access to credit, lack of access to markets, and little influence and control over extension and research information. Emphasis has been placed on PO and DC management training, financial and bookkeeping training, farmer-to-farmer extension, membership management and incentives, credit management and savings, and developing capacities to handle bulk procurement of inputs and bulk marketing. Both POs and their DCs have been guided to achieve greater economies of scale though bulk marketing and bulk input procurement activities. POs and their DCs have received continued technical assistance form USAID APEP to open up and manage commercial bank accounts to boost transparency and ensure security for all business transactions conducted by members through the DCs.

  USAID APEP has also placed emphasis on strengthening the capacity of the corporate partners to take lead in PO development activities. Stronger emphasis has been placed on equipping corporate field staff with skills that enable them guide the process of institutional development. Involved in this special campaign were 190 site coordinators in Busia/Tororo (70 site coordinators) and Teso (120 site coordinators) cotton zones who were trained and got actively involved in PO development and strengthening. Each site coordinator worked with an average of 10 POs. Furthermore, 3 PO Trainers attached to Kyagalanyi Volcafe Nakanyonyi coffee project in Mukono, 2 PO Trainers and 6 site coordinators attached to the OLAM (U) Ltd coffee project in Nakaseke and Rakai and 9 site coordinators attached to Ugacof (U) Ltd coffee project in Iganga, Kamuli and Kinoni received technical support and were all involved in PO formation and development.

  Additionally, expansion into new geographic areas was reduced in order to consolidate and further strengthen the existing POs and their DCs. An emphasis was also placed on internal expansions such that POs that did not have 20-30 members were encouraged to have more members, while DCs who had less than 10 PO members were assisted in their drive to screen and add new PO members.

| | |
|---|---|
| ***Benchmark 5.1*:** | At least 400 new coffee POs (cumulative 1,428) trained and conducting bulk input supply and marketing activities by 9/30/2007<br>~ 423 *new coffee POs (cumulative 1,451) trained and conducting bulk input supply and marketing activities (106% of annual target and 102% of cumulative target achieved).* |

As a result of a massive expansion of PO development activities in the coffee sub-sector that started in the second work plan year, an additional 423 new coffee POs with an active membership of 7,151 farmers have been established around 8 DCs. A cumulative total of 1,451 POs established around 102 DCs with a total membership of 27,848 farmers have been actively involved in conducting bulk marketing activities. Individual operations of the POs by location are highlighted below.

- A total of 172 POs organized under 11 DCs from Kamuli bulk-marketed 731.9 tons of coffee to Ibero and an additional 27 tons of FAQ to Simba Café E.A. Ltd and KAWACOM (U) Ltd. The 3,909 farmers working in the Kamuli PO arrangement received on average a price that was USh150 per kg of Kiboko and USh220 per kg of FAQ higher than average farmer prices from the three buyers they worked with.

- In Bigasa, Masaka district, 1,520 farmers organized under 61 POs that worked under 9 DCs successfully bulked 981 tons of coffee and sold to Ibero. This was a more than 50% increase over last year when 354.4 tons of dry Kiboko were bulked in the Bigasa coffee project area.

- 2,951 farmers in Luwero organized into 76 POs bulked 284.6 tons of kiboko and sold it to Ibero through 11 DCs. The POs in Bigasa and Luwero received, on average, an additional USh200 per kg for their bulked crop.

- 5,277 farmers in Ibanda/Mbarara organized under 258 POs marketed their produce through 23 DCs. Together they bulk-marketed a total of 3,029.1 tons of coffee (2,469.7 tons FAQ and 559.3 ton of lowland Arabica) to Ankole Coffee Processors Ltd.

- In Sironko, 865 coffee farmers organized into 89 POs working together under 5 DCs bulk- marketed 374.3 tons of Arabica coffee into MTL thereby earning an extra USh110 per kg.

- In Rakai, a total of 84 POs under 8 DCs bulked 164.9 tons of coffee (52.8 tons {FAQ} and 112.08 tons of Kiboko) into key leading exporters including OLAM and others. OLAM paid an extra USh200 per kg for this coffee.

- 6,403 farmers in Mityana and Mubende districts worked together under 253 POs to bulk-market 443.9 tons of coffee (442.1 tons kiboko and 1.7 tons FAQ) of coffee through 14 DCs into the Kaweri Coffee Farmers Alliance (KCFA).

- 1,283 farmers in Nebbi worked together under 62 POs to bulk 57.1 tons of Arabica and sold it to Kyagalanyi Coffee Ltd.

- In Mbale 408 farmers working together under 22 POs sold together 57.1 tons through their 2 DCs.

- In Iganga, the 86 newly formed POs under the Ugacof project bulked 18.4 tons of FAQ.

- The Kyagalanyi coffee project in Nakanyonyi Mukono organized over 2,700 farmers under 188 POs. A total 18.7 tons of coffee was bulked in Mukono. In addition, 3 site coordinators working with Ugacof in Kinoni established 35 POs and 15 DC Training Coordinators working with Olam in West Nile region established 65 POs.

As a result of bulk-marketing activities, coffee POs were able to earn an extra $392,007 (Exhibit XXXII). USAID APEP provided technical training on coffee agronomy, pre- and post-harvest handling, and quality control and traceability aspects in collaboration with the commercialization unit through demonstrations and technical trainings. Additionally, linkages to various coffee buyers were strengthened especially with Ibero, MTL, OLAM, UNEX, Simba Café, Kawacom, Ankole Coffee Processors and KCFA. Further expansion is planned in collaboration with OLAM in Nakaseke district.

| Exhibit XXXII: Additional revenue accruing from bulk marketing | | | |
|---|---|---|---|
| **Crop** | **Volume Bulked (Kilograms)** | **Additional Revenue** | |
| | | **Uganda Shillings** | **US Dollars** |
| Coffee | 6,311,244 | 705,613,300 | 392,007 |

The above figures represent reported volumes and additional values of coffee marketed through the respective POs and DCs. Because of bullish market conditions and middlemen recognizing the superior quality and volumes of coffee, many PO members opted to sell individually at the farm gate. In some cases, as little as 25% of the crop was marketed through the PO/DC structures.

| | |
|---|---|
| ***Benchmark 5.2*:** | At least 2,060 new cotton POs (cumulative 2,376) trained and conducting bulk input supply and marketing activities by 3/31/2007<br>*~ 1,340 new cotton POs (cumulative 1,656) trained and conducting bulk input and marketing activities (65% of annual target and 70% of cumulative target achieved).* |

Over the reporting period, the field PO Trainers working in the cotton sub-sector continued to strengthen and train existing POs and to expand into new areas. All 11 PO Trainers working in the cotton sub-sector participated in the ginners planning meetings and are now working in close collaboration with the ginners and the USAID APEP technical staff. As a result of the intensive expansion through the rapid PO development approach, a total of 1,340 new POs were established during the reporting period resulting in a cumulative total of 1,656 POs working around 62 DCs in the districts of Kumi, Pallisa, Mbale, Tororo, Bugiri, Iganga, Nebbi, Masindi, Lira and Apac. The 37,266 cotton farmers working together under the PO structure were able to bulk 7,844.2 tons of seed cotton during the 2006/07 cotton season, of which 4,421.6 tons were conventional and 3,422.5 tons organic. USAID APEP provided TA to train PO members on management and organizational skills required to manage large volumes of crop during the marketing season. In all cases, PO members negotiated prices with the ginners, arranged storage and transport facilities to the buyers. The 1,656 POs who conducted bulk marketing activities earned an extra US$39,670 compared with the non-member farmers (Exhibit XXXIII).

| Exhibit XXXIII: Additional revenue accruing from bulk marketing | | | |
|---|---|---|---|
| **Crop** | **Volume Bulked (Kilograms)** | **Additional Revenue** | |
| | | **Uganda Shillings** | **US Dollars** |
| Cotton | 7,844,174 | 71,406,130 | 39,670 |

***Benchmark 5.3*:** At least 610 new grains POs (cumulative 1,463) trained and conducting bulk input supply and marketing activities by 9/30/2007
*~ 192 new grains POs (cumulative 1,045) trained and conducting bulk input supply and marketing activities (31% of annual target and 71% of cumulative target achieved).*

An additional 192 grain POs were trained and commenced bulk-marketing activities resulting in a cumulative total of 1,045 grains POs with a total membership of 21,776 farmers. These POs were established around 91 DCs. The low level of accomplishment regarding the new POs was due to failure to organize POs in Kabarole (for barley) and part of West Nile (for sesame) as a result of crop failure and lack of interest by the corporate partner respectively. A crop-by-crop breakdown is shown in Exhibit XIV and highlighted below:

- A total of 621 maize POs working under 48 DCs successfully bulk-marketed 5,345 tons of maize grains to the following buyers: UGTL, Busia United Produce Buyers Ltd, IDS (U) Ltd, Kahola Enterprises, Central Purchasing, and Aponye Uganda Ltd and other buyers.

- A total of 317 sunflower POs established under 28 DCs conducted bulk-marketing activities with Mukwano Industries in Lira and Apac. They sold 7,675 tons of quality sunflower grain to Mukwano.

- In Kapchorwa, the 102 POs under their 6 DCs marketed 1,437 tons of barley to Uganda Breweries Ltd.

- A total of 232 rice POs working around 21 DCs bulk-marketed 1,057 tons of paddy rice to UGTL, Busia Quality Traders, Afro-Kai Limited and Nyati Millers. Farmers have started to realize the benefit of value addition in the rice sub-sector. Of the rice marketed, 92 tons were marketed as milled rice.

The financial results from these POs carrying out and managing bulk-marketing activities amounted to US$157,542 during the reporting period as indicated bellow (Exhibit XXXIV).

**Exhibit XXXIV: Additional revenue accruing from bulk marketing of Grains**

| Crop | Volume Bulked (Kilograms) | Additional Revenue | |
|---|---|---|---|
| | | Uganda Shillings | US Dollars |
| Maize | 5,345,209 | 205,314,932 | 114,064 |
| Rice | 1,056,861 | 48,717,150 | 27,065 |
| Sunflower | 7,675,077 | - | - |
| Sesame | 504,115 | 29,543,060 | 16,413 |
| Barley | 1,437,000 | - | - |
| **Total** | **16,018,262** | **283,575,142** | **157,542** |

In addition, 387 POs bulk purchased 53.5 tons of improved seed, 1,384 liters of herbicides, 206 boxes of Round-up Max®, 656 bags (50kg) of DAP and Urea, resulting in a saving of US$18,297 for season 2006A as indicated below (Exhibit XXXV).

**Exhibit XXXV: Savings accruing from Inputs bulk purchase**

| Crop | Volume Bulked | Total Savings | |
|---|---|---|---|
| | | Uganda Shillings | US Dollars |
| **Improved seed** | | | |
| Maize – Hybrid (kg) | 43,743 | 17,036,600 | 9,465 |
| Maize- OPV (kg) | 22,368 | 5,967,600 | 3,315 |
| Upland Rice (kg) | 1,895 | 389,650 | 216 |

| | | | |
|---|---|---|---|
| Coffee (Seedlings) | 251,324 | 62,831,000 | 34,906 |
| Sesame (Kg) | 1,496 | 748,000 | 416 |
| **Sub total** | | **86,959,000** | **48,318** |
| **Herbicide** | | | |
| Roundup EC (litres) | 5,060 | 11,806,000 | 6,559 |
| Roundup Max (boxes) | 70 | 6,097,000 | 3,387 |
| Butanil (litres) | 28 | 56,000 | 31 |
| **Sub total** | | **17,959,000** | **9,977** |
| **Fertilizers** | | | |
| DAP (bags) | 115 | 575,700 | 320 |
| Urea (bags) | 306 | 520,500 | 289 |
| **Sub total** | | **1,096,200** | **609** |
| **Knapsack sprayer (units)** | **203** | **3,905,000** | **2,169** |
| **Tarpaulins (units)** | **4,308** | **47,661,000** | **26,478** |
| **Insecticide (units)** | **7,884** | **7,095,600** | **3,942** |
| **Sub Total** | | **58,661,600** | **32,590** |

***Benchmark 5.4:*** At least 140 new Depot Committees (cumulative 296) trained and conducting bulk input supply and marketing activities by 9/30/2007
*~ 56 DCs (cumulative 212) trained and conducting bulk input and marketing activities (33% of annual target and 69% of cumulative target achieved).*

PO Trainers continued to provide PO members with technical training intended to enable farmers organize and manage their second tier DCs and consolidate their crop and input requirements. This training has enabled farmers to estimate crop output and input requirements, set up financial records, negotiate with local input suppliers and crop buyers, as well as to arrange and monitor input and crop deliveries.

To benefit from economies of scale, 56 new DCs conducted bulk marketing activities bringing the cumulative total to 212 DCs who concluded bulk crop marketing and input purchase. Although this accomplishment is rather low, it is anticipated that the planned target will be achieved by the end of the project as more POs are established under the coffee and cotton programs and guided and consolidated into viable DCs.

Additionally, farmers in 14 DCs applied the same marketing principle received through USAID APEP TA to bulk-market 631.6 ton of millet and Artemisia, although these particular commodities are not on the USAID APEP commodity portfolio. The produce buyers they dealt with included UGTL, Busia United Produce Buyers Ltd, IDS (U) Ltd, Kahola Enterprises, Central Purchasing and Aponye Uganda Ltd, Uganda Breweries Ltd and Mukwano Industries in the grain sub-sector, Ibero, MTL, UNEX, Olam, Ankole Coffee Processors, Simba Café E.A. Ltd and Kawacom (U) Ltd in the coffee sub-sector and all the ginneries in the cotton sub-sector. The DCs also had dealings with 6 input suppliers namely Sukura Agro Input Supply, Monsanto, Mukwano, Victoria Seeds, General and Allied, Ssingo Farm Supply and Idhatujje Fellowship Farm Agency.

As a result, the 212 DCs who conducted bulk-marketing activities earned an additional US$589,219 (Exhibit XXXVI).

| Exhibit XXXVI: Total DC additional income from bulk marketing – 203 DCs participating | | | |
|---|---|---|---|
| **Crop** | **Number of DCs** | **Additional Revenue** | |
| | | **Uganda Shillings** | **US Dollars** |
| Maize | 48 | 205,314,932 | 114,064 |
| Rice | 21 | 48,717,150 | 27,065 |
| Sunflower | 28 | - | - |
| Sesame | 22 | 29,543,060 | 1,955 |
| Barley | 6 | - | - |
| Cotton | 62 | 71,406,130 | 39,670 |
| Coffee | 109 | 705,613,300 | 392,007 |
| Other Crops | 14 | 31,583,850 | 17,547 |
| **Total** | | **1,060,594,572** | **589,219** |

The 64 DCs that carried out bulk input procurement benefited by saving a total of US$27,831 in input procurement costs (Exhibit XXXVII).

| Exhibit XXXVII: Additional Savings- DC input bulk purchase (97 DCs participating) | | | |
|---|---|---|---|
| **Input** | **Number of DCs** | **Total Savings** | |
| | | **Uganda Shillings** | **US Dollars** |
| Improved seed | 27 | 19,304,300 | 10,725 |
| Herbicide | 31 | 10,299,000 | 5,722 |
| Fertilizer | 9 | 733,000 | 407 |
| Other Inputs | 57 | 23,871,000 | 13,262 |
| **Total** | | **54,207,200** | **30,115** |

A comparison of the number of DCs conducting bulk input purchase over the last two seasons indicates a steady increase in the number of DCs involved. Thus, during the fourth work plan year, 64 DCs have conducted bulk input procurement as compared to 38 during the entire second work plan year. This is because more and more members are becoming commercially-oriented as a result of the technical training received from USAID APEP TA and the internal extension system spearheaded by the lead farmers.

***Benchmark 5.5:*** At least 120 Depot Committees assisted to have formal buyer contracts by 9/30/2007
*~80 DCs assisted to have formal buyer contract (67% achieved).*

During the period under review, 80 DCs serving 1,242 POs concluded formal contractual marketing arrangements with buyers. All the formal contracts were entered into during the first half of the work plan year. During the second half, a combination of factors deterred DCs from entering formal contracts with buyers, namely increased competition from middlemen offering attractive prices and the length of time taken to execute the contracts and process payments. Despite this drawback, DCs which participated earned an additional US$292,793 in incremental revenue as highlighted in Exhibit XXXVIII.

| Exhibit XXXVIII: Total DC additional income from bulk marketing – Formal Contracts (80 DCs) | | | |
|---|---|---|---|
| **Crop** | **Number of DCs** | **Additional Revenue** | |
| | | **Uganda Shillings** | **US Dollars** |
| Maize | 28 | 147,452,922 | 81,918 |
| Rice | 7 | 2,665,000 | 1,481 |
| Coffee | 57 | 369,231,190 | 205128 |
| Cotton | 7 | 7,678,350 | 4,266 |
| **Total** | | **527,027,462** | **292,793** |

On the other hand, 123 DCs working with 2,219 POs conducted bulk marketing activities without signing formal contracts. These too benefited from bulk marketing their throughput and earned an additional US$166,275 in revenues as a result of bulk-marketing activities (Exhibit XXXIX).

**Exhibit XXXIX: Total DC additional income from bulk marketing – Non Formal (97 DCs participating)**

| Crop | Number of DCs | Additional Revenue | |
|---|---|---|---|
| | | Uganda Shillings | US Dollars |
| Maize | 20 | 147,452,922 | 81,918 |
| Rice | 14 | 40,974,150 | 22,763 |
| Coffee | 48 | 77,105,040 | 42836 |
| Cotton | 55 | 63,727,780 | 35,404 |
| **Total** | | **329,259,892** | **182,922** |

A total of 212 DCs participated in bulk marketing activities. This was a significant increase from the third work plan year marketing activities in which 156 DCs participated with 66 concluding formal contracts. PO Trainers continued to assist in setting up initial contacts with commodity buyers, while involving PO representatives and depot managers throughout the activity in order to create sustainability. The majority of USAID APEP TA for DCs consisted of budgeting and capital mobilization, input needs assessment, estimating crop output, contract negotiating and procurement, receiving and distributing bulk input supplies and delivering agreed volumes of crop to buyers. Older DCs will continue to receive fine-tuning on these business and management skills while new ones will continue to obtain the full complement of this training from their PO Trainers.

***Benchmark 5.6:*** At least new 840 organic product POs (cumulative 840) trained and conducting bulk input supply and marketing activities with NUECO by 9/30/2007

*~ 846 organic product POs trained and conducting bulk marketing activities (101% achieved).*

Since there is only one cotton marketing season per year, this benchmark essentially remains unchanged from that reported in the semi-annual progress report (which covered the period October 2006 through March 2007). A total of 846 organic product POs comprising 19,987 farmers were established and trained through the rapid development approach to conduct marketing activities with Northern Uganda Eco Organic Ltd (NUECO) in organic cotton and organic sesame produce. A total of 3,422.5 tons of organic seed cotton product was marketed by the participating POs working with NUECO. NUECO committed 3 zonal coordinators, 16 area coordinators and 80 site coordinators to this activity. By the time of preparing this annual report establishment and training of additional organic cotton POs for 2007/08 cotton season was in process and will be highlighted in the next semi-annual report due April 2008.

All NUECO staff received training that equipped them with skills and techniques that would enable them to be effective and efficient trainers and guide the process of organizing organic farmers into business oriented POs. All organic products POs received step by step group training imparting skills that guide organic farmers to be screened, inspected and certified as organic.

## Objective 6: Increased Access to Improved Production Technologies and Practices

*LOP 150,000 producers using improved production technologies and practices*

- ***Strategy***: For all commodities under USAID APEP, production enhancement has been carried out through demonstration activities. Site coordinators who are either part of the local public or private extension community or lead farmers working within established or newly formed producer organizations have been responsible for managing the demonstration sites. The size, site and management structure of the demonstration plots have varied from commodity to commodity, but all are focused on production, harvest and post-harvest aspects to enhance efficiencies. Each demonstration site continued to focus strategically on the "see the difference" principle, with unit cost of production as the foundation of technology support and adoption. A strategic adjustment was effected during the 2005-06 work plan year. In anticipation of significant reductions in funds available for field demonstration activity, increased effort was made to engage donor partners in similar work. This has been effective with the inclusion of Royal Netherlands Embassy (RNE) support for coffee, sesame and sunflower in West Nile, cotton and sesame in Lango and cotton and rice in Teso. The Uganda National Farmers Federation (UNFFE) is providing field support through their district offices, further providing sustainability to post-USAID APEP activities. USAID APEP has also collaborated with NAADS on technology transfer in several commodity areas, including upland rice, coffee and cotton.

  Additionally, corporate partners are taking on more and more of the field extension and support activities. This is evident in cotton, where the technical support at the farmer level is seen as critical to increased growth and stability of the sub-sector. It is likely that the combination of a broadened donor support base with corporate commitment and effective producer organizations will help maintain the majority of USAID APEP production technology interventions even after its close-out.

  The challenge in regard to having access to improved production technologies and practices is not to get partial adoption. All USAID APEP interventions focus on presenting choice to farmers – a suite of technologies which they can chose within their financial and risk envelopes. All collaborating farmers adopt at least 50% of the demonstrated low input technologies in the first year, and follow up to adopt almost all of the low input technologies within 2 years– provided the enterprise choice makes basic economic sense to them.

  Adoption of the high input technologies demonstrated is much more limited. Herbicide and pesticides – very effective and relatively low cost - are easier to promote. Fertilizers on the other hand – essential in the medium term to maintain soil fertility - are much less likely to be adopted. This is due to factors beyond the immediate cost benefit to the farmer. Clearly cost is a factor – not in economic terms necessarily but in cash flow terms. Added to the propensity to buy fertilizers last, is the factor of availability and pack size (related to price). These will continue to require increased emphasis in the future. It is not just a USAID APEP challenge, it is being experienced by all partners supporting the modernisation of agriculture in Uganda.

***Benchmark 6.1*:** At least 1 wet coffee processing technique (cumulative 2) refined by 9/30/2007
*~ No new coffee processing technique introduced (80% accomplished).*

USAID APEP in collaboration with the coffee industry stakeholders continued with the effort to promote the production and of export washed Robusta processing techniques as well as the appropriate washing facilities. USAID APEP, through the SAF, facilitated Ugacof (U) Ltd to acquire 2 mobile Becolsub coffee pulping/demucilaging stations from Columbia. The use of small amount of water required in the Becolsub technology in comparison to the large volume of water required in traditional coffee processing facilities results in less effluent water with associated reduction in pollution. This technology is convenient both in terms of quantity of water required and portability. Both machines were successfully tried with good response from the farmers in Kinoni/Masaka during the April–May 2007 peak season. A total of over 5 tons of washed Robusta parchment was produced given the fact that these were traditionally dried Robusta cherries (Kiboko) by farmers. The Becolsup technology has brought in another dimension for farmers and export enterprises working together. The lesson learnt in Kinoni/Masaka will be used in Kamuli and Iganga districts in the September – November 2007 peak coffee season to refine the techniques and provide guidance for improved efficiency through good agricultural practices and management practices.

For the Arabica areas, USAID APEP in collaboration with MTL/Kyagalanyi identified and selected small-scale portable washing stations from Colombia as suitable technology for the mountainous Elgon area. The units are also eco-friendly in water consumption. The units are being manufactured.

***Benchmark 6.2*:** Improved coffee-banana fertilizer recommendations refined by IITA by 9/30/2007
*~ Refinement I progress but not yet complete (75% achieved)*

USAID APEP through a SAF continued to provide financial support for on-going collaborative research work with the International Institute for Tropical Agriculture (IITA) on refining fertilizer recommendation in banana–coffee cropping systems. About 89% of the targeted 250 farms had been carried out in the seven districts including Masaka, Rakai, Bushenyi, Bududa, Manafa, Mbale and Sironko. During the reporting period, preliminary soil data for Masaka district has been released by the soil laboratory (Exhibit XXXX) although most the foliar and soil sample nutrient analysis were still being carried out.

**Exhibit XXXX: Soil chemical properties for Masaka, for different banana coffee systems**

| System | OM(%) | N(%) | P (ppm) | *K |
|---|---|---|---|---|
| Banana non fert. | 3.3 | 0.13 | 39.4 | 0.77 |
| Coffee Demo | 3.0 | 0.11 | 15.7 | 0.85 |
| Coffee non fert. | 2.9 | 0.10 | 24.0 | 0.35 |
| Coffee-banana Demo | 2.9 | 0.10 | 32.2 | 0.62 |
| Coffee-banana non fert | 3.3 | 0.13 | 59.8 | 0.65 |

* Units: meq/100g soil
*Source: IIATA*

Organic matter ranged from 2.9% to 3.3% while nitrogen ranged from 0.10% to 0.13%. This data will, however, be verified in the next quarter (October-December 2007). USAID APEP in collaboration with the local district authority and collaborative exporting firms continued to encourage farmers to use affordable available organic manure and continue with the present recommended inorganic fertilizers to address the declining soil quality. It is only after the results have been fully analyzed that a refined recommendation can be disseminated.

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| ***Benchmark 6.3*:** | At least 45,000 existing coffee farmers exposed to improved production techniques through 1,500 demonstration sites by 9/30/2007<br>47,138 *coffee farmers exposed through 3,771 demonstration sites (105% achieved).* |

The low productivity of coffee has still remained a major concern to the industry. In this regard USAID APEP, in collaboration with district local authorities, sub-county crop extension staff and the coffee enterprises involved in transfer of technology at farm levels, continued to intensify farmer training through the coffee demonstration sites, though in several instances, the demonstration plot size has been reduced (from 110 to 25 trees for Robusta and from 136 to 50 trees for Arabica) in order to cope with the increased demand and get sufficient spread effect. During this reporting period, USAID APEP TA continued to monitor and provide technical support to the existing 3,771 coffee demonstration sites. At these demonstration sites, farmers were exposed to improved coffee technologies and good management practices within their localities. According to field day records, a total of 47,138 farmers, of which 6,601 were women, were exposed to improved coffee management practices.

In addition to the existing larger demonstration sites of 110 and 168 coffee trees for Robusta and Arabica respectively, smaller new demonstration sites of 25 and 50 trees for Robusta and Arabica respectively have been identified to accommodate and achieve effective training of the increased number of coffee farmers over the coming season.

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| ***Benchmark 6.4*:** | At least 50,000 existing cotton farmers exposed to improved production techniques through 2,500 demonstration sites by 9/30/2007<br>*~ 50,453 farmers exposed (101% achieved).* |

During the period under review, USAID APEP established 2,690 cotton demonstration sites (1,690 conventional and 1,000 organic) throughout the cotton production zones in Uganda with the exception of Teso sub-region, since CN Cotton, the lead ginner in the sub-region, was not a USAID APEP SAF beneficiary for the 2007/08 cotton season.

So far 50,453 farmers have been exposed during the 2007/08 cotton season, to improved production techniques. Farmers organized in groups and producer organizations have continuously utilized the presence of these demonstration plots to benefit their members by encouraging members to adopt the technology and practices exhibited.

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| ***Benchmark 6.5*:** | At least 2,000 new (cumulative 35,000) sunflower farmers exposed to improved production techniques through 600 sunflower demonstration sites by 9/30/2007<br>*~ 34,374 cumulative sunflower farmers exposed through 2,113 sunflower demonstration sites (98% achieved).* |

During the 2006B season, A.K. Oils and Fats (U) Ltd established 1,428 demonstration sites in Masindi, Lira, Apac, and Oyam districts. The demonstration sites exhibited two (2) packages namely; the high external input and low external input packages to show the farmers the visible advantages between the available technologies. The high external input package demonstrated proper agronomic practices including the use of improved seed “PAN 7351”, Glyphosate herbicide and Diammonium phosphate fertilizer. The low external input package demonstrated proper agronomic practices with improved seed. The 2007A season

witnessed further USAID APEP support to the company through demonstration establishment of 500 sites using the newly introduced Monsanto planting materials, DKF 6822.

Through an extension system comprising 4 district and 98 site coordinators, 31,291 collaborating farmers were exposed to improved production technologies during the reporting period using the demonstration sites and commercial adopters' fields. Data from the demonstration sites indicated significantly higher yields of the improved variety "PAN 7351" compared to the old open pollinated varieties in farmers fields. The average yield from the high external input package was 908 kg per acre while the low external input package gave 533 kg per acre.

Sanyu Agro Industries Ltd., another company that recently entered the oil milling industry successfully established 136 demonstration sites in Nebbi district, West Nile sub-region. USAID APEP together with Sanyu provided institutional development and technical training to a team of 2 Zone and 6 Depot Committee Training Coordinators that facilitated the exposure of 3,083 collaborating farmers to improved production technologies. The average yield from the high and low external input packages were 792 and 502 kg per acre respectively.

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| ***Benchmark 6.6*:** | At least 12,000 new (cumulative 50,000) upland rice farmers exposed to improved production techniques through 600 upland rice demonstration sites by 9/30/2007<br>*~ A cumulative 44,408 upland farmers exposed through 3,614 demonstration sites (89% accomplished)* |

During this reporting period USAID APEP with its collaborative partners continued to expose farmers to improved upland rice production in key selected upland rice belts which included: Eastern belt – Kumi, Bukedea and Mbale; Mid –Western belt – Hoima, Masindi, Kibaale; Western belt - Runkungiri, Kabarole and Kyenjojo; Northern belt - Gulu,Amuru and Pader; and Central belt - Luwero, Wakiso and Nakeseke. A total of 1,033 additional demonstrations were established with partners (SOMED, NAADS, OVP, Caritas) targeting 5 decongested camps. A total of 44,408 farmers were exposed, 13,320 of whom were females. USAID APEP through its SAF program continued to support 4 rice processing companies to enhance their production capacity by providing technical assistance and demonstrations to farmers in 7 districts: Bukedea, Kyenjojo, Gulu, Hoima, Masindi, Nakaseke and Kibaale.

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| ***Benchmark 6.7*:** | At least 12,000 existing sesame farmers exposed to improved production techniques through 600 sesame demonstration sites by 9/30/2007<br>*~ 11,318 sesame farmers exposed through 666 demonstration sites (94% achieved).* |

A total of 836 technology transfer sites were established during the reporting period by four sesame trading companies in West Nile and Lango/Teso sub-regions. Two companies operating in West Nile - Olam (U) Ltd and CARE Uganda/Nile Pro Consult Ltd/UNO Trading Co. Ltd established 490 and 120 sites respectively. In the Lango/Teso sub-region, Outspan Enterprises Ltd and Shares! (U) Ltd/LOFP established 50 and 176 demonstration sites respectively. While Olam and UNO traded in conventional sesame during the first 6 months of the work plan year, Olam has shifted to trading in organic sesame during the second 6 months of the work plan.

USAID APEP in collaboration with the corporate companies provided institutional development and technical training to a team of 12 area and 64 site coordinators during 2006B season. However, during the 2007A season, the extension structure of the team changed. Olam restructured the team to 11 Depot Committee Training Coordinators who received TA from USAID APEP. These facilitated the exposure of 11,318 collaborating farmers to improved production technologies such as improved varieties, timely and proper land preparation, and timely planting, proper spacing, and weed and pest control, and post harvest handling practices through the extension team(s). Average yields obtained from the technology transfer sites were about 350 kg per acre compared to 150 kg per acre for the local varieties.

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| ***Benchmark 6.8*:** | At least 10,000 existing vanilla growers exposed to improved production techniques through the vanilla outreach program 9/30/2007<br>*~ 11,285 vanilla farmers exposed to improved production practices (113% accomplished)*. |

With financial and technical support from USAID APEP, VANEX continued to train farmers in improved methods of vanilla production, productivity and quality control. A 4-day residential training-of-trainers refresher course for VANEX coordinators, extension workers and 11 NAADS staff was held in February 2007. The workshop attracted a total of 72 participants. The training also included an HIV/AIDS component with the USAID-funded PSI project.

Technical assistance to vanilla growers through the outreach program and extension services linked to the 60 demonstration plots continued throughout the reporting period. Returns submitted by VANEX showed that during the period under review, 11,285 farmers (3,160 females) were exposed to improved practices through the demonstration sites and extension workers' efforts. Regular training events focused on improved field management practices such as shade management, mulching, proper looping, pollination, harvesting and quality control. Estimated procurement from 10 major local buying companies was 1,594 tons of green beans of which 60% was January harvest (usually considered a fly crop). The price of green beans remained low, in a range of USh1,500 to 2,500 per kg.

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| ***Benchmark 6.9*:** | At least 1 new improved banana farming practice (cumulative 4) disseminated by 9/30/2007<br>*~ 1 new improved banana farming practice disseminated, 100% accomplished)* |

With financial and technical support from USAID APEP, the International Institute of Tropical Agriculture (IITA) continued to carry out on-farm research focusing on increasing profitability of bananas through improved production techniques/practices and evaluation and dissemination of at least 4 new banana hybrids. The practices included improved rapid multiplication of clean planting materials, refined fertilizer recommendations, mulching, and crop protection. During the reporting period, IITA research assistants continued with studies on socio-economic and biophysical factors and agronomic practices that influence banana production at all selected demonstration sites. Activities geared toward fine-tuning recommendation to improve banana profitability continued. Preliminary results from the on-farm studies showed banana production is influenced to a greater extent by soil fertility status and crop management practices – in contrast to the traditional research approach of tackling pest and disease constraints. Fertilizer application was the most important parameter contributing towards increased yield, resulting in up to more than a 50% increase in bunch weight. Across the nine districts, demonstration plots under rehabilitation had higher number of bunches harvested per mat and higher yield compared to control plots.

Farmers to host macro propagation demonstrations were selected in four districts (Masaka, Rakai, Mpigi and Mukono), and 8 macro-propagation shades were constructed where farmers were trained in rapid multiplication of bananas. Each macro propagation unit is capable of multiplying from clean corms, an average of 3,000 plants per annum off 7.5 $m^2$ of nursery area. The nursery operator is able to sell the planting material at USh800-1,000 per plant with a resulting gross income of USh2.4-3.0 million per annum. With financial assistance from USAID APEP and IITA TA, Mukono farmers through their district farmer's association exhibited the banana macro–propagation technology during the National Agricultural Show held at Jinja and more than 1,000 people visited the stand.

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| ***Benchmark 6.10*:** | At least 10,000 existing banana farmers exposed to improved production techniques through 215 banana demonstration sites by 9/30/2007<br>*~ 8,360 banana farmers exposed (83% accomplished*) |

The prolonged rains in most places coupled with good management practices enhanced banana production. All established gardens from tissue culture materials were in full production. Farmers managed to sell suckers to collaborating farmers at a price range of USh300–1,000 per sucker. Although adoption rate of tissue culture is rated low, there is an increased demand for the clean planting materials as revealed by increased orders to AGT (supplier of tissue culture materials).

USAID APEP technical assistance to banana growers continued through demonstration activity. All lead farmers received inputs such as fertilizers. USAID APEP TA, together with agricultural extension workers at sub-county level continued providing training focusing on improved agronomic practices and crop protection measures including Banana Bacterial Wilt (BXW) awareness campaigns. During the reporting period, USAID APEP TA together with local extension workers continued to carry out on-farm training events at the demonstration gardens and other collaborating farmers' gardens. Based on returns from site coordinators 7,036 farmers (4,080 females) were reached through 215 demonstration sites and other extension services. APEP TA in conjunction with IITA and NARO, conducted outreach training events to farmers in four districts namely Masaka, Rakai, Mpigi and Mukono, focusing mainly on banana macro propagation, about 800 farmers being trained. Additional training events were carried at BXW benchmark sites in Luwero and Mukono through farmer research groups, reaching a total of 524 participating farmers and local leaders.

Returns from some farmers' demonstration plots indicated relative increase in bunch number and weight. This was achieved through a combination of high level inputs such as clean tissue culture materials, fertilizers, mulch and good management practices. On average, bunch weights were above 30 kg with extremes of 50–70 kg recorded in Bushenyi and Manafa. Farm gate prices ranged from USh3,000 to 10,000 per bunch depending the region and size of the bunch. However, in some regions, on-farm prices reduced to as low as USh1,500 during the bumper harvest of July–September 2007.

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| ***Benchmark 6.11:*** | Refined fertilizer recommendations for at least 4 key USAID APEP commodities developed and disseminated by 9/30/2007<br>*~ Fertilizer recommendations were discussed and agreed upon by stakeholders. Dissemination yet to start (50% accomplished).* |

This activity was reported on in the last reporting period as it was completed around September 2006 when the stakeholders' meeting was convened. With IFDC STTA, a follow-up residential short course on soil modeling using DSSAT was conducted for 13 Ugandan researchers was conducted in May 2007. The dissemination has, however, not started

because the follow up activities agreed on by the stakeholders have stagnated. MUFA will establish a data base on soil, crop requirements and climate for making best-bet fertilizer recommendations. This will occur in FY08.

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| ***Benchmark 6.12:*** | At least 50,000 additional farmers (cumulative 130,000) adopting USAID APEP demonstrated improved technologies and practices by 9/30/2007<br>*~ Cumulative 189,556 farmers adopting low input technology packages (146% accomplished).* |

Exhibit XXXXI shows the number of farmers exposed and those adopting improved production practices/technologies. Overall, the number of farmers who have adopted at least a portion of improved low input practices was 204,926 (representing a 71% adoption rate across all USAID APEP commodities for farmers exposed) while those who have adopted improved high input practices was 6,361 (a 2.2% adoption rate across all the USAID APEP commodity portfolios). These figures are derived from field day attendance (exposure) and sentinel sites (adoption by technology). Of those adopting low input technology, about 92.5% of them (189,556) have at least 0.25 acres under improved production technologies based on returns fro sentinel sites across all USAID APEP-supported commodities.

**Exhibit XXXXI: Farmers Adopting APEP Promoted Technologies**

| Crop/Enterprise | Number of farmers exposed | Adoption of high input technology | Adoption of low input technology |
|---|---|---|---|
| Cotton | 131,437 | 854 | 88,063 |
| Upland rice | 44,408 | 2,220 | 35,526 |
| Sunflower | 34,354 | 172 | 30,919 |
| Barley/Maize | 2,654 | 1,062 | 2,389 |
| Sesame | 11,318 | 0 | 4,527 |
| Coffee | 47,138 | 1,886 | 30,640 |
| Banana | 8,360 | 167 | 5,434 |
| Vanilla | 9,285 | 0 | 7,428 |
| **Total** | **288,954** | **6,361** | **204,926** |
| **Percent adoption across USAID APEP commodities** | | **2.2%** | **71%** |

As can be seen from the Exhibit above, most adoptions are still at the low input level, despite yield enhancements and reductions in unit cost of production demonstrated with the high input technologies. Obviously, weather and commodity prices cause farmers to be risk averse. But, we need to become a lot smarter in understanding what motivates farmers to become “fully modernized”. The challenge is therefore not of adoption per se, but rather that of sustained adoption which evolves from low input to high input technologies.

## PIR 3. Improved Enabling Environment

*LOP 10 Key policy and institutional constraints alleviated*

To support activities carried out under PIRs 1 and 2, there are certain policy, regulatory or bureaucratic issues, as well as cross-cutting issues that USAID APEP should address. PIR 3 is designed to support these activities, which aim to address and alleviate constraints to increasing commercialization of agricultural commodities. Objectives 8 to 11 are designed to generate results that contribute to the achievement of PIR 3.

## Objective 7: Identify and Address Agricultural Policy Constraints

*LOP 15 Key policy constraints addressed*

- ***Strategy***: This objective covers the identification and provision of support to mitigate policy, regulatory and bureaucratic bottlenecks to targeted commodity production and marketing. Although policy and regulatory change is beyond USAID APEP manageable control, the project continued to support this undertaking by providing expert opinion, guidance, and issue profiles. However, USAID APEP took care not to become totally engaged in any of the processes, but leveraged industry and public sector (donor and GoU) in order to address the issues.

  Policy issues are only dealt with when they become absolute roadblocks to progress, and when all avenues to address the issues have been exhausted. In this way the project simply does not get bogged down in what by definition are bureaucratic issues. When a policy issue becomes a real issue, USAID APEP will always work with the affected parties in resolution. This insures quick and effective execution of meetings and committee requirements. It also means that the government which is required to amend the policy can immediately see that this is an issue that business requires adjustment – not simply a project with a benchmark to fulfill.

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| ***Benchmark 7.1***: | Variety descriptors developed for private seed sector, in partnership with ASPS II, to develop capacity for inspection by 9/30/2007<br>*~ No variety descriptors developed yet, though inbred lines have been planted (30% accomplished)*. |

This activity has begun with USAID APEP STTA and the inbred lines have been planted at 3 sites, Masindi, Kasese and Kawanda. The Kawanda site is a reference site for the national seed inspection services to carry out the required DUS tests on the inbred lines to augment the information required for the final descriptor documentation. The descriptors will not be concluded until the end of 2008A season.

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| ***Benchmark 7.2***: | Rice quality standards adopted by the industry by 9/30/2007<br>*~ Quality standards not yet presented to policy makers (10% accomplished).* |

In Uganda the current level of protection of the domestic rice sub-sector through the CET provides an opportunity for development but this opportunity is not fully utilized due to lack of a quality standard being adopted by stakeholders in the rice industry.

USAID APEP, in collaboration with the Uganda Commodity Exchange (UCE), has developed standards for post-harvest handling, milling and polishing to enhance the quality of Uganda rice and this will be tested using the Warehouse Receipts System (WRS). The standards are currently being promoted and tested with various stakeholders in the country. The second rice policy stakeholders' meeting was conducted on 24th May 2007 at USAID APEP office and the first meeting of the eastern Uganda rice processors/producers association was held with ASPS II support in Jinja with the objective of enhancing quality of local rice. USAID APEP continued to provide technical input as appropriate as well as perform a secretarial role for the Uganda EAC rice task force members that include GoU through the Office of the Vice President, private sector (rice processors and chemical companies) and NGOs.

## Objective 8: Stimulate Demand Driven Commercial Agricultural Training

*LOP 200 Individuals completing internships with private sector firms*
*LOP 365,000 Individuals trained in private sector agriculture disciplines*

- ***Strategy***: As stated in the PMA, Uganda's challenge is to develop education and outreach programs that are increasingly farmer-driven and farmer-oriented while also increasing the participation of the private sector. In this regard, USAID APEP continued to assist the GoU agencies and institutions by providing more demand-driven commercially oriented formal and informal educational programs; supporting private sector training and outreach initiatives; and providing commercially oriented project training delivered directly by USAID APEP or by partners and SAF awardees.

  University students and farmers are very responsive to appropriate training. This has been a lesson learned over the life of project. Interns are enthusiastic because placements give them opportunities to display their capabilities and hopefully secure employment after graduation.

  Farmers have consistently supported the field demonstrations provided that lead farmers and the supporting management structures have ensured that the topics remain motivational. In other words – as long as the demonstrations show something adaptable and are obviously beneficial to the farmer he/she will participate. Training remains demand-driven as long as there remains something to learn and chose from. USAID APEP demonstration programs have long incorporated something new and perhaps just outside the reach of the average grower. This seems to keep attendance up and pioneers striving.

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| ***Benchmark 8.1*:** | 50 new MUFA internships (cumulative 200) placed with private firms and public sector institutions by 9/30/2007<br>*~ 79 interns (cumulative 235) placed in June 2007 (118% accomplished).* |

The internship program that has to-date placed a cumulative total of 235 students with local agribusinesses and public institutions, and the program has come to a conclusion. A workshop to evaluate the impact of the field attachment and the sustainability of the future program has been scheduled for 10th October, 2007.

The increase in number of students completing the internship is attributed to the following:

- The Field attachment being co-opted as an examinable component on the course syllabus and contributing to the student grades. Hence it was compulsory for all the students to go through the internship.

- There has also been leveraging of funds with the donor institutions such as Government of Uganda and I@mak, hence many more students were placed.

- The internship has also been very successful because of the positive response by the private sector, which has been very supportive in hosting the students. The companies have increasingly developed an interest in the students which has made the placement of students easier to administer.

However, the program has also had challenges among which are:

- The short duration of about 10 weeks for the internship period, which does not provide time for the students to gain as much experience and skills as expected since it is shorter than a full cropping season.

- The increasing number of academic institutions conducting the internship program around the same time, hence many students seeking placements in a limited number of host private sector companies and public institutions. There is therefore a need to explore more linkages and creative opportunities for the placement of the students.

- With the USAID APEP project coming to the end, there is need to identify other sources of funding other than the Government of Uganda which is currently the only funding institution at the time.

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| ***Benchmark 8.2*:** | At least 2 pest management training courses held in collaboration with UGCEA by 9/30/2007<br>*~ 8 pest management training courses held (400% accomplished).* |

A refresher pest management training was conducted for 14 pest managers, who in turn have provided the facilitation for 8 follow up pest management training courses organized at zonal level to train all the site coordinators/field officers for USAID APEP supported ginners. To-date, 325 participants have been trained in key aspects of pest recognition and identification, pest management and control measures, scouting techniques and spray timings. During the period under review, USAID APEP supported a total of 8 pest management training courses – 5 in conventional cotton and 3 in organic cotton.

UAID APEP has registered success in pest management in terms of addressing the issues of Integrated Pest Management (IPM) in the field. At the ginnery level, all the production managers have been exposed to basic principles of IPM. All the site coordinators and field officers already trained have trained lead and collaborating farmers; and in some ginneries there is solid evidence and presence of the Pest Management Charts to monitor the impact and levels of infestation in field.

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| ***Benchmark 8.3*:** | At least 3 seed company personnel attend short courses on seed technology by 9/30/2007<br>*~ No short courses organized for seed company personnel (0% accomplished).* |

During the reporting period, no short courses were organized for seed company personnel as no formal contacts were made and arrangements completed with suitable institutions. However, some US institutions were contacted for opportunities available for the short term courses.

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| ***Benchmark 8.4*:** | 2 PhD candidates (cumulative 3) complete course work at US universities by 8/31/2007<br>*~ 3 PhD candidates placed and completed their first year studies as the US universities (100% accomplished).* |

USAID APEP under its formal educational plan with MUFA has facilitated 3 PhD candidates placed at US universities on a sandwich program. The candidates have completed their US course work. The candidates will continue with their PhD research at Makerere University in the various fields as shown in Exhibit XXXXII.

**Exhibit XXXXII: USAID APEP PhD Placements**

| Rank | Name of Scholar (Organisation) | Current status | Title of concept |
|---|---|---|---|
| 1 | Richard Miiro (MAK) | **PhD** student previously attached at Iowa State University | Effective and sustainable farmers' organizations: An analysis of structure and agency among market oriented farmers organizations in Uganda |
| 2 | Michael Kidoido Mukembo (MAK) | **PhD** student previously attached at Ohio State University | The impact of Production and Price risks on Uganda Maize Industry. |
| 3 | John Bosco Kawongolo (MAK) | **PhD** student previously attached at Michigan State University | Integrated Approach to utilization of Biogas in Drying Technologies for Bananas. |

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| ***Benchmark 8.5*:** | 3 MSc candidates placed at MUK complete course by 9/30/2007<br>*~ No MSc candidate has completed his/her course work (0% accomplished).* |

USAID APEP has continued to build capacity of the development partners including MAAIF, Makerere University and IITA. Currently USAID APEP is supporting 7 MSc and 1 PhD candidates for their studies at Makerere University with the research focus in the USAID APEP promoted technologies/commodities as shown in Exhibit XXXXIII below.

**Exhibit XXXXIII: USAID APEP MSc Placements**

| Rank | Name of applicant (Organisation) | Current status | Title of concept |
|---|---|---|---|
| 1 | Rwamigisa Patience B. (MAAIF) | **PhD** student AEE | Agricultural extension and research policy development process in Uganda: Implications on the functioning of institutions in the **delivery of agricultural extension services** |
| 2 | Siamba Byakika Paul (District) | **M.Sc.** Soil Sc. | Organic residue management options to enhance production in a **banana-vanilla-cardamom** cropping system in the Central region of Uganda |
| 3 | Naakubuza Gertrude (MUARIK) | **M.Sc.** student Soil Science | Effect of Crotalaria on nematode infestation in **bananas.** |
| 4 | Arinaitwe Bosco (MAAIF) | **M.Sc.** AEC | A cost benefit analysis of improved **storage techniques** for small holder **maize** farmers in Uganda. A case of Mbarara district. |
| 5 | Kahangi Benon (MAAIF) | **M.Sc**. AEE | An assessment of socio-economic effect of the **coffee wilt** disease and its implications on coffee production. |
| 6 | Simon Peter Okiror (MAK) | **MSc**. Student Agric. Econ | The effectiveness of **farmer groups** in increasing rural household incomes, access to production resources and food security in Kapchorwa District, Eastern Uganda. |
| 7 | Jolly Dusabe (IITA) | **MSc**. Student Agribusiness management | Performance and adoption of **Tissue Culture Bananas** in Western and Central Uganda. |
| 8 | Sylivia Natukunda (MAK) | **MSc**. Student | Profitability of integrated farming systems on selected **Commercial Banana farms** in Uganda. |

It is envisaged that by the close of the project support (April 2008) all the scholars will have completed their studies or nearing completion. The strength is that the funding has given the students an opportunity to complete their studies and conduct research in areas which required gap filling identified by themselves and institutions to boost production interventions.

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| ***Benchmark 8.6*:** | 3 MSc candidates and 2 PhD candidates enrolled in degree programs at MUK 9/30/2007<br>*~ 2 MSc candidates and 1 PhD candidate enrolled (60% achieved).* |

During the period under review, two students – Siamba Byakika Paul and Kahangi Benon were enrolled for MSc programs in Soil Science and Agricultural Extension and Education respectively. Another MSc student drawn from IITA will be supported to undertake a research on "The performance and adoption of tissue culture bananas among farmers in Western and Central Uganda".

1 PhD candidate – Rwamigisa Patience was enrolled for a program in Agricultural Extension Education.

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| ***Benchmark 8.7:*** | At least 16 new participants (cumulative 48) from floriculture industry complete the Applied Tropical Floriculture course by 6/30/2007<br>*~18 full-course participants (cumulative 50) from floriculture industry completed ATF training (113% accomplished).* |

Industry training needs are varied and continuous. Through USAID/APEP SAF, UFEA and TA in conjunction with Makerere University Continuing Agricultural Education Centre (CAEC), organized and conducted the 10$^{th}$ Applied Tropical Floriculture Course (ATFC) from December 2006 up to July 2007. The course aimed at building capacity of supervisors and middle managers in the floriculture sub-sector. Two modules of ATFC were taught each month for seven months. Eighteen participants (14 from flower firms, 2 from FHL and 2 from MAAIF) were fully registered. Out of the 18 participants; 6 were University graduates; 2 diploma holders; 2 UCAE certificate holders; and 8 UCE holders. The course covered all aspects of flower growing and marketing issues. Occasionally, training events in various areas of flower production were also conducted at individual farms as per their needs. Due to success of ATFC, the NUFFIC – a Dutch agency supporting educational programs is assisting UFEA in partnership with Bukalasa Agricultural College, Mountains of the Moon University, and the Practical Training Center (PTC+), Netherlands to manage a training program in floriculture leading to diploma award. During the review period, a team of 9 people was selected and underwent a nine-week training of trainers' course; I week on flower farms in Uganda and eight weeks at PTC+ Netherlands. Necessary infrastructures like greenhouses have been constructed at both locations (Mountains of the Moon and Bukalasa).

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| ***Benchmark 8.8:*** | At least 230,000 participants (cumulative) locally trained in various agricultural disciplines through USAID APEP's training events by 9/30/2007<br>*~ 321,713 participants trained (140% accomplished).* |

Exhibit XXXXIV shows the cumulative number of participants trained in various agricultural disciplines over life of project. The numbers have been categorized under three training

approaches: field days; formal and informal; and long-term training. The formal training events refer to well-structured training such as the ATFC, Internship program, group/association training, seminars, etc. A cumulative total of 321,713 individuals (32% of whom were females) have been trained in various agricultural disciplines over life of project.

**Exhibit XXXXIV: Number of Individuals Trained in Various Agricultural Disciplines**

| Training Category | Number Trained | | |
|---|---|---|---|
| | Males | Females | Total |
| Field days | 206,654 | 99,640 | 306,294 |
| Formal/informal training | 11,379 | 4,029 | 15,408 |
| Long-term training (MSc & PhD) | 9 | 2 | 11 |
| **TOTAL** | **218,042** | **103,671** | **321,713** |

***Benchmark 8.9:*** At least 20 agricultural bank staff trained in agricultural lending practices by 9/30/2007

*~26 agricultural bank staff trained in agricultural production lending practices (130% achieved).*

During the reporting period, 26 Agricultural loans officers from various CERUDEB branches were trained by USAID APEP specifically on financing production of upland rice and maize in a workshop organized in conjunction with USAID Rural SPEED in Masaka.

***Benchmark 8.10:*** USAID APEP technology packages realigned to address IEE concerns by 9/30/2007

*~ 100% accomplished)*

All technology transfer training activities reflected the necessary changes due to the introduction of new crop protection chemicals into the program. All products that have been removed are no longer mentioned and those that are in the process of re-introduction are being promoted at the level of the corporate (especially in cotton as they are the principal promoters of the crop protection products) and at the level of the grower through the training sessions at demonstration sites in cases where new products are available at this time. In order to increase business confidence in the promotion and registration of new products and to foster linkages with the corporates, special attention was focused at the crop protection chemical wholesalers. Efforts aimed at bringing organic pest control practices into full commercial use resulted in increased awareness and uptake of IEE appropriate technologies.

***Benchmark 8.11:*** At least 6 pesticide and fertilizer safe-use trainings conducted by 9/30/2007

*~ No pesticide training event conducted, (0% accomplished).*

This activity was programmed to commence in April 2007 following the full establishment of crops for the 2007A season, but was deferred to the 2007/08 work plan year.

## Objective 9: Establish and Operationalize Biotechnology Regulatory Environment

*LOP 3 Biotechnology and Biosafety regulations improved*
*LOP Biosafety committee has capacity to review applications for trials*

- ***Strategy**:* Biotechnology applications in agriculture have the potential to maximize productivity. Biotech crops can increase productivity, reduce pesticide, fuel, and water usage, promote commercialization of smallholder agriculture, and tackle nutrition issues in malnourished communities. USAID APEP activities in biotechnology are supported by other initiatives, including the USAID Program for Biosafety Systems (PBS) and the USAID Agricultural Biotechnology Support Program II (ABSPII). During the period under review USAID APEP TA activities continued to focus on three areas of biotechnology support. These included the strengthening of the biotechnology and biosafety regulatory and policy framework; strengthening of the National Biosafety Committee (NBC); and provision of managerial, technical and financial support to agricultural biotechnology research and technology transfer undertakings in Uganda.

  Research and technology transfer activity under USAID APEP has continued to provide collaborative and coordinating support towards effective implementation of biotechnology research and technology transfer activities in Uganda. USAID APEP continued to serve as a catalyst in providing support for technology transfer opportunities such as GM cotton.

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| ***Benchmark 9.1*:** | Technical and Financial assistance provided towards strengthening the National Biosafety Secretariat at the UNCST by 9/30/2007<br>*~ 100% accomplished.* |

The UNCST received a USAID APEP grant in the amount of US$86,943 for the period August 2004 – December 2007 to operationalize the National Biosafety Secretariat.

The Biosafety Desk Office at the UNCST is fully operational and regular technical advice and financial support continued to be provided. During the period under review, the USAID APEP Biotech Advisor maintained regular contact with the Desk Office at UNCST and established a very good working relationship with the Council as a whole. As a result of this capacity building, the NBC is fully equipped to receive and process GMO applications. Recently, the NBC approved field testing application of transgenic banana - the first time in Uganda. The banana materials were imported after some delays in obtaining the import permit and are now at the Confined Field Trial (CFT) site at Kawanda. This is a very encouraging development. Two transgenic cotton (BGII and RRF) field testing applications were reviewed by the IBC and submitted to the NBC. The NBC has performed 2 reviews and its final determination is conditional on a site visit to Mubuku and the applicant (NARO) addressing additional issues raised.

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| ***Benchmark 9.2*:** | Biotechnology and biosafety policy and regulatory framework approved by GoU in collaboration with PBS and UNCST by 9/30/2007<br>*~ (0% accomplished, an on-going effort to get things moving)* |

This benchmark has remained a very challenging one all along. The UNCST which is the lead agency of the Biotechnology and Biosafety policy document has been trying to push for Cabinet approval, which still remains a pending issue. There seem to be more pressing issues than Biotechnology and Biosafety policy. Therefore this activity remains as on-ongoing effort until the document is approved.

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| ***Benchmark 9.3***: | Biosafety Bill approved by 9/30/2007<br>*~ (0% accomplished so far)* |

This benchmark is very much linked with Benchmark 9.2 and should be viewed as a difficult step as well. It is very complex and involves high level political and legislative decision. USAID APEP will nevertheless keep providing input where necessary to ensure that the bill is approved within the shortest time possible.

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| ***Benchmark 9.4***: | Biotech and Biosafety Communication and Outreach Strategy and Action Plan implemented in collaboration with PBS-Uganda and UNCST by 9/30/2007<br>*~ (100% accomplished)* |

The Biotechnology website is in place, up and running. This specific activity is an ongoing process and it is well underway.

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| ***Benchmark 9*.5:** | Biotech Cotton technology transfer and confined field testing started by 9/30/2007<br>*~ GM cotton confined field testing not yet started (0% accomplished).* |

Two GM cotton confined field testing sites were selected and field preparation has started. A Research Cooperation Agreement between the technology provider and NARO has been signed. Two transgenic cotton (BGII and RRF) field testing applications were reviewed by the IBC and submitted to the NBC. The NBC has performed 2 reviews and its final determination is conditional on a site visit to Mubuku and the applicant (NARO) addressing additional issues raised. The 2007/08 planting season for cotton has passed, so the only remaining window under USAID APEP is for confined field testing to start in 2008.

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| ***Benchmark 9.6*:** | One external study tour completed for 10 key biotech stakeholders in collaboration with PBS-Uganda by 9/30/2007<br>*~ A tour was organized to South Africa for 10 high level decision makers (100% accomplished).* |

USAID APEP, in collaboration with USAID PBS sponsored ten high level decision makers including State Ministers, Presidential Advisors, Biotechnology Regulators and S&T Managers to the Republic of South Africa for a one-week (19-26 March 2007) biotechnology and regulatory study tour.

## Objective 10: Stimulate Demand Driven Agricultural Research

*LOP 25 Research contracts implemented by public sector*

- ***Strategy***: USAID APEP's mandate is to help in this process by determining, with the various commodity sub-sectors, the real research needs of each sub-sector. These needs have been met by linking demand for the results of such research to the respective industry. This linkage has served to stimulate continuing relations between research service providers (public and private) and the demand for results. Research activities under USAID APEP have not been long-term, generating results within 3 years at a maximum. All research under USAID APEP has been demand driven and is stimulated by the real needs of the private sector operating in commodity chains supported by the project. Agricultural research has also drifted towards private research with GoU oversight. This has ensured that trials are cost effective and planted on time. Since the companies themselves are anxious to utilize the data, they pay close attention to performance throughout the season and push hard for the final data analysis and outcomes. This is totally different to the "research for research sake" options that emerge very often from pure research institutions when funding is available to do good work. Our aim in supporting research is to rapidly progress to commercialization – something usually slow or totally lacking.

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| ***Benchmark 10.1***: | 1 technology package on cost-effective control of BBW developed and disseminated by 9/30/2007<br>*~ 1 research contract completed (100% accomplished)* |

Through USAID APEP SAF, INIBAP/Bioversity was funded to carry out trials on understanding Banana *Xanthomonas* wilt control options and post-infestation replanting interval using participating farmers' fields as research venues in Luweero and Mukono districts using Pisang Awak' ('Kayinja') (AABB group) and 'Matooke'(AAA-EA group) cultivars. The project activities included evaluation of control options such as de-budding with forked sticks at several stages of male-bud development, bagging with plastics, destruction of the diseased mats, and rehabilitation of heavily diseased plots. Appropriate fallow period required to prevent re-infestation was also studied. An economic viability analysis of the different control options was conducted. The results were presented at workshop in Kampala on 9/28/2007. From the studies, the best BXW management practices include timely de-budding of the male bud after the formation of the last cluster and single plant removal at the corm level when applied at early stages of floral infection to stop the disease from spreading to the whole mat, destruction of infected plants using herbicides and a fallow period of 6 months before replanting.

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| ***Benchmark 10.2***: | At least 3 new banana hybrids disseminated to 2,000 farmers in 4 banana growing districts by 9/30/2007<br>*~ No disseminations as yet, 0% accomplished* |

Through the SAF, USAID/APEP continued to support IITA to evaluate performance of four banana hybrids that have been incorporated with resistance to black sigatoka and nematodes in selected districts (Rakai, Masaka, Mpigi and Mukono). Planting and gap filling were completed and field monitoring of trial plots in the districts continued. Sensory evaluation of the hybrids started in Masaka and Mukono that were planted earlier than the rest. Ratings were done basing on pulp, colour, taste, texture, flavour and general acceptability. These evaluations are continuous and need to replicate in Mpigi and Rakai

once the bananas are ready for harvest. Dissemination of the hybrid will be done once the hybrids are released by the governing authorities.

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| ***Benchmark 10.3***: | 1 preliminary CWD coffee resistant strain research findings made available by 9/30/2007<br>*~ Preliminary CWD coffee resistant strain research findings made available (100% accomplished)* |

During the period under review, USAID APEP signed a research contract with Coffee Research Centre (COREC) – formerly Coffee Research Institute (CORI), of the National Crops Resources Research Institute (NaCRRI) to provide financial support for intensification and acceleration of research activities for development of wilt resistant varieties to be made available for multi-locational on-farm trials as well as the most effective way of producing plantlets in large quantities. Through the financial support, the necessary inputs were provided for the increment and expansion of resistant CWD mother gardens and bushes. Under the same contract, the 25 pre-selected CWD resistant Robusta coffee clones have moved from the research station trials stage to on-farm field trials in multi-locations in the districts of Mukono, Mityana and later to Kamuli and Ibanda. All the on-farm field sites which are hosted by farmers were identified jointly by USAID APEP collaborative enterprises together with respective POs and DCs and accepted by the COREC as farmer based research.

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| ***Benchmark 10.4***: | At least 1 Arabica coffee IPM package developed and refined by 9/30/2007<br>*~ Analysis of data in progress (85% achieved)* |

During the period under review, the work on the IPM program initiated by USAID APEP TA together with COREC, local district authorities and the industry as well as other research institutions and universities continued. USAID APEP, MTL, COREC and USAID IPM/CRSP conducted a pilot participatory Arabica Integrated Crop Management (ICM) in the districts of Sironko, Mbale, Manafa and Bududa. Preliminary research works provided required data on: socio-demographic profile of Arabica coffee farmers, marketing practices, knowledge of most important pests (insects, diseases, weeds) as well as the current pest management practices leading to a biological monitoring protocol (BMP). The BMP will be assembled and implemented with the coffee farmers and local district authorities. Successful completion of BMP activities will provide a framework for refined IPM research priorities on Arabica coffee.

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| ***Benchmark 10.5:*** | 1 flowers research contract completed by 9/30/2007<br>*~ (80%, accomplished).* |

Through a SAF, USAID APEP provided financial support to Pearl Flowers to run trials on different rose varieties to determine the best performers. More than forty varieties of T-hybrids and intermediates from 4 different breeders were tested and promising varieties were selected based on a combination of characteristics that include color, production, susceptibility to disease, head size, stem length, vase life and market acceptance. Four varieties from the trials have been selected for commercial production. Average production from higher altitude for intermediates was in a range of 230 – 250 stems/$m^2$/year as compared to central region (lowland) of 260 – 280 stems/ $m^2$/yr. There was improvement in stem length (more than 70% were 50cm and above) and bud size (3.85cm) compared to the same lowland intermediate varieties (more than 60% are 40cm with bud size of 3cm). Average per-stem price was almost double the price for lowland product. Pearl Flower, like

any other flower farm, will continue to carry out research activities as part of its ongoing business activities.

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| ***Benchmark 10.6:*** | 1 sunflower variety development research contract established by 9/30/2007<br>*~ No contract established (0% achieved, expected during the next work plan year)* |

USAID APEP continued to partner with NARO in conjunction with the private sector. Trials of new materials – either imported or locally produced - are made in conjunction with Mukwano field activities. This reduces the cost of the field activities since they are handled by the site coordinators and it ensures that plantings are made on time, thus securing realistic results with lower variations. Such partnership will continue during 2007/08. As at the time of report writing, three varieties, AGSUN 8251, DKF 6822 and DK 4040 were ready for release.

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| ***Benchmark 10.7:*** | At least 2 new rice production technologies tested by 9/30/2007<br>*~ Two rice technologies evaluated (100% accomplished).* |

During the reporting period USAID APEP in collaboration with WARDA – technology transfer Unit exposed farmers to two new rice technologies: (i) seed health handling and storage methods, and (ii) Rats control in rice fields using indigenous farmers' knowledge from West African farmers. The technology transfer process was effected through video shows. Balton (U), USAID APEP and MAAIF continue to test the Bird Shield® repellant chemical. USAID APEP provided TA and it is anticipated that by the end of March, 2008 the repellant will be released for commercial use. USAID APEP continued with the smallholder agriculture development program in rice farming by training and promoting ULV sprayers with farmers in IDP camps in Northern Uganda (Gulu and Pader) for multipurpose use in rice production. USAID APEP has also facilitated a local artisan for fabrication of a rice planter, and this will assist in making of local prototype than depending on the imported ones from China.

## PROGRAM MANAGEMENT

Project Management, Monitoring and Evaluation are integral parts of the project. There are four essential components to USAID APEP management: SAF management, environmental compliance, monitoring and evaluation, and project administration.

### Strategic Activities Fund Management

The Strategic Activities Fund (SAF) under USAID APEP was established to complement core project activities and contribute to achieving the project sub-objective of increased commercialization of targeted commodities. The SAF serves as a leveraging tool by providing funds for direct interventions to awardees as part of larger targeted opportunities, maximizing resources available to Ugandan partners. Support through SAF local contracts, grants, cost-sharing agreements, and purchase orders has been provided to public sector institutions, associations, businesses, NGOs, and individuals whose proposed activities meet USAID APEP eligibility/evaluation criteria, as well as contribute to project results (Annex E).

## Objective 11: Implement an Effective SAF Program

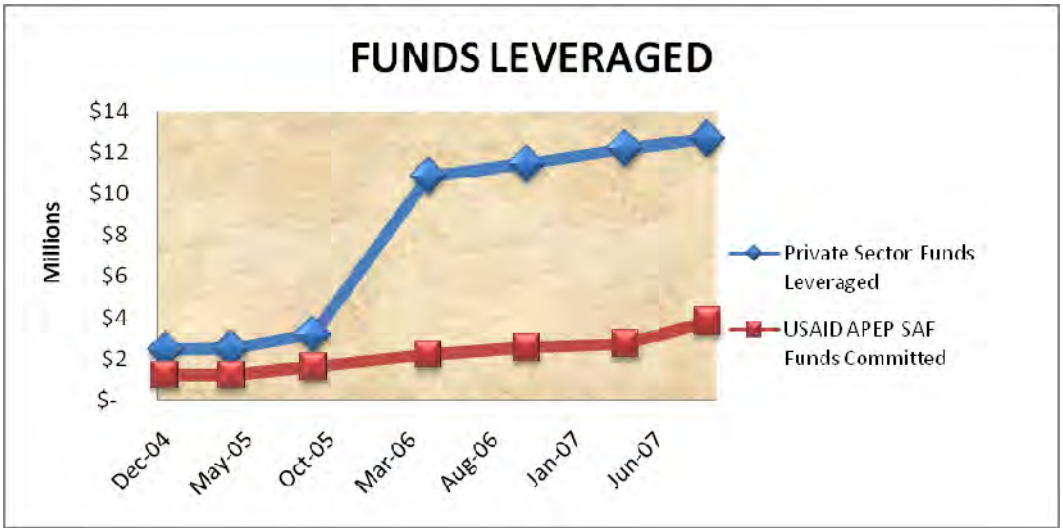
- ***Strategy***: By leveraging SAF resources, USAID APEP has continued to target opportunities for strategic intervention with clients and partners. The technical team and SAF Administrator continued to identify activities within USAID APEP commodity portfolio that contribute to the program's overall objective. SAF awards have been issued and governed according to the procedures established in the SAF Instruction Manual and the SAF Operations Manual. In addition to developing cost-sharing relationships with clients, the SAF Administrator has fostered strategic alliances with private sector partners.

In implementing the SAF on a cost-share basis with collaborating clients, USAID APEP has set standards that have made the private sector move out to the farmer fields and understand the concept of the commodity supply chain right from production level to market level. The SAF support has outlined the importance of demonstration programs, research and training. With such involvement and appreciating the benefit of direct linkage to the farmer producer organizations, the clients have been inclined to increase their resources in terms of staff, inputs and equipment.

The SAF intervention has generated greater farmer enthusiasm and furthered technology adoption. The private sector partners have improved their management practices, added value to their operations and improved their perception of the productivity enhancement opportunities. Now that there is improved quality and increased production of the commodities, the challenge that looms for the private sector is the affect on farmer loyalty as "middlemen" move in at the stage of buying and offer higher prices which easily attract the farmers. This usually happens when there is a market boom, such as in coffee. However, this setback is in the short run because "middlemen" never buy when prices plunge whereas the corporate enterprises maintain their presence and are always there for the farmers and at the same time do not compromise quality of the produce as is the case with "middlemen".

The rising trend in private sector investment in the graphic presentation below (Exhibit XXXXV) shows that the collaborating partners are braced for the competitive market and are not deterred by the "middlemen" interference. Therefore the corporate partners have to continue strengthening their relationships with the farmers to increase loyalty and in turn this will enhance sustainability.

**Exhibit XXXXV: Funds Leveraged through USAID APEP SAF Program**



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| ***Benchmark 11.1***: | SAF activities report submitted by 10/31/2006 and 4/30/2007<br>*~ SAF reports submitted on 10/31/2006 and 4/30/2007 (100% accomplished).* |

The SAF activity reports are submitted in combination with the USAID APEP semi-annual and annual progress reports. The previous SAF activity reports were submitted on 10/31/06 with the annual report and 4/30/2007 with the semi annual report. The current SAF report is included in Annex E. This report shows all activities and programs awarded since the start of USAID APEP implementation.

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| ***Benchmark 11.2***: | At least an additional $480,000 (cumulative $3,700,000) of SAF Committed by 09/30/2007<br>*~ US$3,819,934 of the SAF has been committed to-date (103% accomplished).* |

As shown in Annex E, US$3,819,934 of the SAF has been awarded to-date. USAID APEP has continued to award grants and subcontracts through the SAF and to-date has made a total of 83 awards, all of which followed the award process established in the SAF Operations Manual. These awards include activities in each of program's commodities.

All of the SAF programs continue to be championed by USAID APEP commodity specialists, who are responsible for overseeing the technical implementation of project activities. Each long-term program includes benchmarks and a comprehensive monitoring system that typically involves monthly or quarterly financial and technical reporting.

SAF awardees have been carefully selected, and mentored with complementary TA and SAF compliance guidance. In practically all cases, the expected outputs are being achieved, and USAID APEP has not had to cancel or drastically realign any of the SAFs.

## Environmental Compliance

As per the contract Section 3.3 and in accordance with 22 CFR 216, Chemonics included in the fourth annual work plan a section on environmental compliance that outlines the mitigation plan for the work plan year for all activities that were identified in the IEE as having a negative determination with conditions. Activity under this section is reflected in objective 12 that follows.

### Objective 12: Implement and Maintain an Environmental Compliance and Mitigation Plan

- ***Strategy***: As guiding documents, USAID APEP has an Initial Environmental Examination (IEE) with categorical exclusions and a negative determination with conditions that apply to: pesticide use, requiring a Pesticide Evaluation Report and Safer Use Action Plan (PERSUAP); fertilizer inputs; biotechnology applications, including biosafety; introduction of new seed varieties; training on safe use of pesticides and fertilizers; and an environmental review process for SAF awardees. These include mitigation and monitoring measures. Environmental compliance cuts across all IRs and sub-IRs and this objective synthesizes the reporting.

  Strategically, this remains a challenge under the project – particularly with regard to pesticides. Already identified are suitable replacements for most environmentally unsuitable CPC's. The testing, registration and promotion, however, are totally in the

hands of the local and international suppliers. Additionally, delays in processing replacements put pressure on the environmental compliance aspects of the program. There appears to be no solution to this challenge – promising delivery but having no control over the process of such delivery. It simply depends on a continued effort on the part of the project to nudge replacements into the system as fast as possible. An additional issue is that of cost. Replacements are usually still on patent and are likely to be more expensive than the established but unapproved generics. This requires specific lobbying of all parties to see the need and benefit of replacement.

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| ***Benchmark 12.1*:** | USAID APEP technology packages continued to be realigned to address IEE concerns and PERSUAP recommendations by 9/30/2007.<br>*~ (100% accomplished)* |

Enthusiasm for organic cotton has increased dramatically during the reporting period. A difficult cotton year combined with increased international market demand for premium organic cotton has been the cause. The intention of USAID APEP TA in this commodity is to develop a complete organic package that works to produce organic cotton at the same or better levels in terms of farmer incomes than conventional cotton. The notion of "real organic" has been promoted with responsible positions being promoted for soil fertility as well as pest control. This has resulted in under trial a package for organic cotton as shown in Exhibit XXXXVI. One additional organic pesticide supplier has expressed interest in developing its products for the organic sector- Prathista, India. Its products include organic nutrient sources as well as botanical pest control products.

**Exhibit XXXXVI: Summary of USAID APEP supported Organic Cotton products**

| Problem | Organic solution/Potential solution[#] |
|---|---|
| Soil Nitrogen | Rotation with Mucuuna – seed secured. seed centers established in West Nile and in Oyam Districts. |
| Soil Nitrogen | Application of non-symbiotic nitrogen fixing bacteria. TwinN, (Mabiotech) and symbion–N (TStanes) under trial this year |
| Soil Phosphate | Rock phosphate (Minjingu) and Flamingo Guano (Lachlan) being introduced in field trials under NUOPPA |
| Soil Phosphate | Solubilising bacteria under trial – Symbion –P (TStanes) |
| Soil nutrient mobilization | Humic acids - 2 sources included in the field trials |
| Sucking Pests | Soapy water as previously used (organic certification required on the choice of soap)<br>Nimbicidine (Atazirachtin 0.03%) being validated under NUOPPA trial |
| Sucking Pests | Bio-Catch (Verticillium lecani 1.15%) and Oxymatrine 2.4ec (prosuler oxamatrine 2.4%) under trial at the NUOPPA trial site as approved by the competent authority |
| Bollworm complex | Nimbicidine (Atazirachtin 0.03%) being validated under trail at the NUOPPA site |
| Bollworm complex | NoMate pheromone traps (agrilandbiotech) under trial at the NUOPPA trial site |
| Bollworm complex/Sucking pests | Bio-power (Beauveria bassiana 1.15%) under trial at the NUOPPA trial site as approved by the competent authority |
| Bollworm complex | Bio-Magic (Metarhizium anispoliae 1.15.%) under trial at the NUOPPA trial site as approved by the competent authority |
| Bollworm complex | Spinosad awaiting organic registration of appropriate formulation |

[#] *These are in addition to rotational and catch crop or other non chemical means also under trial at the NUOPPA site*

Conventional cotton continues to be a focal point as far as CPC compliance is concerned. Acephate is available for the forthcoming season and Acetamiprid is awaiting final release by the Agricultural Chemicals Board. This should be in time for application under conventional conditions. Inorganic pesticide usage has fallen dramatically due to the collapse of the cotton

zoning system so ginners are averse to supplying pesticides to farmers who may side-sell their seed cotton.

Floriculture through UFEA continues to be proactive and has made some important progress on environmental issues, partly in response to being MPS compliant. Soil sterilization without methyl bromide continues with alternative technologies and the industry continues to seek crop protection chemicals with reduced environmental and human health risks.

A summary of cumulative activity relating to PERSUAP is presented in Exhibit XXXXVII.

**Exhibit XXXXVII: Summary of PERSUAP Activities to date**

| Replacement product | Replacing - Product/Month/ Year | Commodity Targets | 2006/07 Progress |
|---|---|---|---|
| Lambda Cyhalothrin | Oct 2005 | Cotton | Sold as Ambush Super and Ambush CY as pure form products. Removed from CDO recommendation list as of May 2005. No longer promoted in any of APEP technology packages. |
| Paraquat | Oct 2005 | Coffee | Sold as Gramoxone. Product removed from all recommendations with immediate effect - May 2005. |
| Coumatetralyl, Coumachlor | Oct 2005 | Upland Rice | Not recommended at all in APEP programs. All rodent control is by cultural methods. |
| Cypermethrin | Oct 2005 | Upland Rice | Not part of upland rice package with effect March 2005 plantings |
| Deltamethrin | Oct 2005 | Coffee | Not part of coffee package with effect October 2005 |
| Fenitrothion | Oct 2005 | Coffee | Not part of coffee package with effect October 2005 |
| Pirimiphos-ethyl | Oct 2005 | Bananas | All banana technology packages promote pseudostem trapping as the only IPM method current for weevil management with effect October 2005. Imidacloprid (Confidor) being tested in demonstration plots with heavy infestation (where mulching recommendations produce a moist environment conducive to weevils). Work with NOGAMU has been initiated to support the import and development of commercial *Beauveria bassiana* control measures. Commercial trials of Bio-Power if approved will provide a commercial product suitable for weevil control. |
| Fluazinim | Oct 2005 | Coffee | No technology package recommended for CBD control through 2005. Benomyl available in the market place available for promotion |
| Bromoxynil | Oct 2005 | Barley | Replaced by Iodosulfuron-methyl-sodium (Hussar) on a limited scale during the 2006 first and second plantings. Herbicide performed well during 2006 and will continue to be part of the barley technology package in 2007. |
| Imidacloprid (Confidor) | Chlorpyriphos (Dec 07) Carbosulphan (Apr 08) Fenitrothion (Apr 08) | Coffee | Determined availability and efficacy of Confidor in coffee through COREC Awaiting finalization of recommendation to be included in technology package. This recommendation will likely be finalized next reporting year. |
| Imidacloprid (Gaucho seed dressing) | Dimethoate (June 07) Bronopol (Apr 08) | Cotton | 3,305 acres treated with Imidacloprid for the 2005/06 season with some encouraging results. Despite early season dryness, sucking pest control was noticeably improved over spray treatments with lower losses due to Lygus. This is especially important with BPA 2002 as it is slightly earlier. In addition, since all cotton seed will be brush delinted for the 2007/08 season, thiamethoxam (Cruiser) has been imported for all seed segregated areas as well as any demonstrations under conventional cotton. Application still uncertain and only to be considered for the 2008 plantings provided the industry resolves its internal issues. |
| Malathion | Chlorpyriphos Dec 07) | Coffee | Establishment of demonstrations under SAF with new partnerships, activity initiated with no Crop Protection Chemical as part of the technology package. Pest incidence very low except with one instance of Root Mealybug due to poor planting material with Ibero. Otherwise no serious pest problems in Robusta |

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| Carbaryl | Chlorpyriphos (Dec 07)<br>Dimethoate (Dec 07) | Coffee | Establishment of demonstrations under SAF with new partnerships, activity initiated with no Crop Protection Chemical as part of the technology package. Pest incidence very low except with one instance of Root Mealybug due to poor planting material with Ibero. Otherwise no serious pest problems in Robusta |
| Acephate | Profenophos (Apr 08)<br>Fenvalerate (Apr 08)<br>Fenitrothion (Apr 08)<br>Cypermethrin (Apr 08)<br>Deltamethrin (Apr 08)<br>Diazinon (Apr 08) | Coffee, Cotton, Upland Rice, Barley | Discussions with the trade supplier ongoing as to reintroduction of Acephate into the cotton sector and opportunities to promote in other seasonal and perennial crops. Agreement reached on reintroduction and promotion in the 2007/08 planting as well as modest promotion where opportunity arises in 2006/07. Dunavant and all northern ginners now fully embrace the development of a total organic package and thus are no longer using any inorganic products. |
| Benomyl | Copper oxy – chloride (Oct 05) | Coffee | Results and applicability determined from Kenya experience in Arabica CBD and Leaf Rust control. Rates and timings determined for Uganda conditions. IPM CRSP determined the importance of the disease but no IPM disease control measures are available. No suitable recommendations emerging from this to date – further work during the growing seasons 2007/08. |
| Dithianon | Copper oxy – chloride (Oct 08) | Coffee | Results and applicability determined from Kenya experience in Arabica CBD and Leaf Rust control. Rates and timings determined for Uganda conditions. IPM CRSP determined the importance of the disease but no IPM disease control measures are available. As above for data. |
| Acetamiprid | Profenophos (Apr 08)<br>Fenvalerate (Apr 08)<br>Fenitrothion (Apr 08)<br>Cypermethrin (Apr 08)<br>Deltamethrin (Apr 08)<br>Diazinon (Apr 08) | Cotton | Ongoing encouragement of Balton as the principal supplier to continue registration for inclusion in the 2007/08 cotton season early sucking pest control regime. Final release of the product by the ACB was not finalized by the end of the season in 2007. According to the company, it is still waiting for final release as at the time of reporting. This has not been formally released for the 2007/08 crop. |
| Thiamethoxam | Dimethoate (June 07)<br>Bronopol (Apr 08) | Cotton | Continued discussions with cotton ginners as to the need for an early introduction of Thiamethoxam as a viable alternative to control early season sucking Lygus and aphids. Initial Masindi district response being transmitted to the ginners to further encourage serious consideration of at least limited commercial introduction in 2007/08.<br>Thiomethoxam has been imported for all the cotton seed production areas this year as well as for inclusion in the cotton demonstrations to be undertaken through USAID APEP support. |
| Spinosad | Profenophos (June 08)<br>Fenvalerate (June 08)<br>Fenitrothion (June 08)<br>Cypermethrin (June 08)<br>Deltamethrin (June 08)<br>Diazinon (June 08) | Cotton | Supplier skeptical about the potential market - due to cost considerations, and reluctant to invest in registration and promotion. Continued discussions having limited results in the absence of some promotion activity. Work too has advanced the possible inclusion of Spinosad into the organic production packages for the coming year. The formulation is however different to that already registered in Uganda and the manufacturer is reluctant to finance the registration of the new product. |
| Azadiractin | Chlorpyriphos (Dec 07)<br>Dimethoate (Dec 07) | Cotton, Coffee, Upland Rice | Successfully introduced with positive results in the organic cotton sector. Commercial supplier identified and linkage with the manufacturer made to ensure correct pack size applicable to Uganda smallholder production. The product did not perform well in the 2006/07 season. It is not a pesticide in the conventional sense in that it does not knock down like a pyrethroid of OP pesticide. Grower sensitization was insufficient and expectations were too high. Work with the manufacturer and supplier has refined the application rate to 3 sprays with average 200 ml per acre as opposed to 2 sprays at 500 ml per acre. Pack size has been adjusted to reflect this for the |

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| | | | 2007/08 season. Initial trail results on an observational basis only show the product to be effective at these rates of application. |
| Dazomet | New introduction - replacing Carbofuran (Apr 08) | Banana nematode control | Farmers in central areas who have been used to using chemical control for nematodes are being sensitized as to the use of alternatives. Dazomet still unregistered but local suppliers are being apprised of the market potential and the benefits of product registration. Work with NOGAMU in developing biologicals is underway in conjunction with Indian suppliers. |
| Botanical and Biologicals for nematode and banana weevil control | New Introductions | Nematodes and weevil | Commercial biologicals and botanicals are available elsewhere to control these pests. The ACB currently will not allow importation of living biologicals as a matter of policy. USAID APEP is working with all parties to resolve this so that trials can commence on suitable products. Since the biorationals have been approved for testing in cotton, it is likely that Paecilmoyces lilacinus 1.15% (Bio-Nematon) will be approved for test in bananas. This product has the potential to control plant parasitic nematode species. |

***Benchmark 12.2*:** At least 10 pesticide and fertilizer safe-use trainings conducted by 9/30/2007

*~ 6 formal trainings conducted (60% complete)*

Safe use continues to be reflected in all field staff trainings but particularly in stockist training throughout the country. Six training events were conducted in western Uganda during the reporting period. These trainings have been led by the USAID APEP Agri- Inputs Specialist.

***Benchmark 12.3*:** All SAF awardees environmental reviews completed by 9/30/2007

*~ Environmental reviews completed for all SAF awardees and field reviews conducted (100% accomplished)*

During the period under review, all current awardees' activities were inspected during the normal course of delivering TA to determine compliance with environmental and mitigating actions, including identification of any additional environmental issues that have arisen, including appropriate mitigation measures to be adopted. All new SAF applicants have also completed the Environmental Review Form.

***Benchmark 12.4:*** At least 2 pesticides approved for cotton usage in accordance with PERSUAP recommendation by 9/30/2007.

*~ Nimbicidine approved for cotton (50% completed)*

Work to promote the cotton seed dressings is complete as is the work to finalize release of acetamiprid. Trials in the current growing season have included biologicals and botanicals with the objective of confirming efficacy as well as compiling the appropriate release dossiers. Trial work to further refine azadirachtin application rates and methods will continue. Acetamiprid has not been released for the 2007/08 cotton planting season as the ACB is still awaiting final documentation. However, Nimbicidine (Azadirachtin 0.03%) is approved for cotton usage and is dominating the organic cotton sector. Additionally, Oxymetrine (a botanical) has been approved for trial plus 3 bio-rational organic pesticides.

| | |
|---|---|
| ***Benchmark 12.5:*** | Guidelines on pesticide usage refined and disseminated in conjunction with USAID PRIME/W by 9/30/2007<br>*~ No formal guidelines finalized and disseminated (0% accomplished)* |

No formal documentation has been finalized for this activity. However, all partners working around protected areas have been sensitized as to the need to protect theses areas by avoiding spraying. Based on the final report conducted by USAID PRIME/West, the following was taken into account :

"The development and enforcement of "no-spray" buffer zones around protected areas is not practical at this time. Such a solution would create more conflict with frontline communities, in a situation where there is already significant conflict. It is practical, however, for demonstration plots that may use pesticides [to be] located and managed so that drift or runoff from the plots will not deposit pesticides in protected areas. If special guidelines for pesticide use near protected areas were to be developed, they would have to be **promulgated by the ACB and included on pesticide labels**. The guidelines could include "no spray" buffers and restrictions on applications when wind is blowing towards protected areas or in winds exceeding 15 kilometers per hour. Given the findings of this report, the development of **national guidelines for pesticide use near protected areas is not warranted at this time"**[1]

It was concluded therefore simply to adopt the following strategy in all instances where pesticides are used:

1. Incorporate training in proper handling, use, and disposal of pesticides in any activities that directly or indirectly promote the use of pesticides.

2. Locate demonstration plots that may use pesticides at least 15 meters upwind and 30 meters upgradient from the boundaries of any protected areas.

3. Manage the use of pesticides on demonstration plots so that they are not applied when the wind is blowing towards protected areas and when the wind speed is 15 kilometers per hour or greater (i.e., when wind is strong enough to move small branches and raise dust).

## Monitoring and Evaluation

Monitoring progress and evaluating results are key management functions in USAID APEP. Performance monitoring is an on-going process that allows USAID APEP and USAID Kampala managers to determine whether or not the project is making progress towards its intended results.

### Objective 13: Implement and Maintain an Effective Monitoring and Evaluation System

- ***Strategy:*** The USAID APEP Monitoring and Evaluation (M&E) system is based on an impact design linking activities to desired outcomes and impacts. This design is reflected in the USAID APEP RF presented in the first section of this semi-annual progress report. The M&E system is intended to provide the foundation for tracking the project's delivery of expected outputs and quantitative impacts to measure progress, as well as support USAIDs M&E needs by providing input to the Mission's

[1] Krahl Report Sept 2005

SO7 and associated IR indicators. During the period under review, USAID APEP continued to use a distributed approach to M&E where all project team members and partners were responsible for collecting M&E data in their technical areas. The M&E Specialist continued to coordinate this effort and consolidated all data collected and generated aggregate data for the M&E indicators. Close liaison was maintained with the USAID SO7 team and the USAID-funded Monitoring and Evaluation Management Services (MEMS) project.

| | |
|---|---|
| ***Benchmark 13.1*:** | M&E system updated and made consistent with SO7 requirements by 09/30/2007<br>*~ M&E system and indicators updated (100 % accomplished).* |

During the first half of the fourth work plan year, the M&E data collection tools were refined to meet additional data needs and the USAID APEP Program Assistants were utilized during the data entry process. The results of the data entered have been utilized in generating this annual progress report and in verifying project achievements for the key indicators identified in the Project' Performance Monitoring Plan (PMP).

As a way of gauging adoption rates and associated project impact at the household level, 320 sentinel sites covering the key commodities supported by USAID APEP were maintained as shown in Exhibit XXXXVIII.

The sentinel sites are made up of a representation of USAID APEP clients/beneficiaries sampled from the list of collaborating farmers around a demonstration centre. These sites continued to be used to generate data regarding changes in production practices, input usage, income levels, on-farm jobs and changes in area, output, yields, and volumes and values of commodities marketed.

**Exhibit XXXVIII: USAID APEP Sentinel Sites for 2006/07**

| Commodity | No. of sites established | No. of districts |
|---|---|---|
| Cotton | 90 | 9 |
| Coffee | 70 | 6 |
| Banana | 30 | 2 |
| Upland rice | 40 | 5 |
| Sunflower | 40 | 4 |
| Maize | 50 | 5 |
| **Total** | **320** | |

Towards, the end of the work plan period, USAID introduced a new format for reporting IEHA indicators. The USAID APEP M&E Specialist attended an induction workshop were the key features and aspects of the reporting format were elaborated upon.

| | |
|---|---|
| ***Benchmark 13.2*:** | Secondary data collected and updated by 9/30/2007<br>*~ Secondary data updated on a regular basis (100% accomplished, on-going activity).* |

The M&E Specialist, with support from USAID APEP TA maintained close working relationships with data providers identified during the previous years of project activities. USAID APEP continued to receive regular industry-wide data on cotton, coffee, flowers and vanilla, which are utilized to assess overall industry performance. Other data sources of relevance to the project include the Uganda Bureau of Statistics (UBOS), the Bank of Uganda (BoU), Regional Agricultural Trade Intelligence Network (RATIN) and project collaborators including ASPS II, NAADS, PMA, USAID Rural SPEED and USAID FEWSNET. The USAID FEWSNET rainfall data and RATIN cross-border trade statistics, in particular form part of this annual report.

| | |
|---|---|
| ***Benchmark 13.3*:** | At least one verification/impact study conducted by 09/30/2007<br>*~ Two studies conducted (200% accomplished).* |

As a way of ascertaining economic returns from adopting the technologies promoted by USAID APEP, the M&E Specialist together with the Finance Specialist conducted a series of cost of production and profitability analyses. The study covered the project's key commodities - cotton, coffee, banana, upland rice, sunflower, barley and maize. Results of the survey have been utilized in this report to generate net returns resulting from technology adoption.

As part of USAID requirement, USAID APEP conducted a poverty assessment survey, whose objective was to ascertain the poverty level of and show the proportion of USAID APEP beneficiaries who can be classified as "the very poor" and those who may be classified as "the not so poor". The survey carried out among 448 households in 8 randomly selected districts where USAID APEP operates showed that 9.6% of the USAID APEP beneficiaries may be categorized as the very poor and 90.4% as the not so poor.

| | |
|---|---|
| ***Benchmark 13.4*:** | At least 10 USAID APEP impact stories produced by 9/30/2007<br>*~ 8 impact/success stories produced (80%accomplished).* |

During the period under review, the M&E Specialist in collaboration with the respective TAs at USAID APEP identified 11 cases and prepared 8 success stories. These covered technology adoption, agricultural finance, PO strengthening, producer-buyer linkages and private sector investments. Exhibit XXXXIX shows the 8 success stories, the details of which may be found on the USAID APEP website www.apepuganda.org.

**Exhibit XXXXIX: USAID APEP Success Stories**

| Category of story | Story title |
|---|---|
| Case Studies | • The Benefits of a Strong Producer-Buyer Linkage: A Case of IBERO (U) Ltd<br>• USAID APEP Plays A Positive Role in Influencing Agricultural Policy Decisions |
| First Person | • USAID APEP Increases Farmers' Access to Banana Tissue Culture Materials<br>• Kigangazi DC in Masaka District Plays a Lead Role in Enabling Farmers Access Agricultural Inputs |
| Photo & Caption | • New Sunflower Oil Mill Installed in Lira by A.K Oils and Fats Ltd |
| Before & After | • The Benefits of Agricultural Lending: A Case in Kiziramfumbi sub-county, Hoima district |
| Impact Studies | • Creating Opportunities for Improved Incomes through a Market Driven Approach: The Case of Upland Rice<br>• USAID APEP Leverages Funds from the Private Sector through its SAF Program |

## Project Administration

Chemonics places great emphasis on providing effective administrative and logistical support to all field programs, as well as assuring contract compliance. A home-office Project Management Unit (PMU) is assigned to each project. This unit comprises a project supervisor who works closely with the field-based chief-of-party in all aspects of contract management; a project administrator who liaises directly with the field-office operations management to provide administrative and logistical support; and an assistant project administrator. Chemonics is committed to supporting USAID APEP so the project will achieve results on schedule, within budget and in compliance with all applicable rules and regulations. The Chemonics Home Office PMU is not a direct cost to USAID APEP, except where there are specific field assignments, pre-approved by the CTO.

## Objective 14. Provide Effective Contract Administration

- ***Strategy:*** The PMU has continued to work closely with the project office to assure contract compliance, to assist with regular contract reporting, and to provide financial analysis for management.

During the reporting period, Geoffrey Livingston, the PMU supervisor, resigned from Chemonics and was replaced by Harvey Schartup. Also, Michael Goldman, the PMU Administrator, resigned and was replaced by Brian App.

| | |
|---|---|
| ***Benchmark 14.1*:** | Financial reports and pipeline analyses provided to USAID quarterly, by 12/15/2006, 03/15/2007, 06/15/2007 and 09/15/2007<br>*~ Four financial reports submitted in December 2006 and March, June and September 2007 (100% accomplished)*. |

As required by USAID APEP contract Section I.1, Chemonics submitted quarterly financial reports and pipeline analyses to USAID on 12/15/2006, 03/16/2007, 06/15/2007 and 09/19/2007. A Limitation of Funds notification was also submitted on 12/15/2006. These reports were compiled and submitted by the HO PMU. Contract Mod. No. 12 on 08/31/2007 obligated $1,500,000 in incremental funding. The total obligated amount is now $19,299,521. Monthly vouchers were also submitted.

The reduction in USAID SO7 funding for FY06 resulted in a $600,000 reduction in USAID APEP funding. To realize the reduction in budget, USAID APEP expatriate LTTA Commodity Commercialization Director, Daniel de Reuck and Producer Organization Director, Michael Mailloux, were both terminated on 10/31/2006. There are also reductions in SAF and Training budgets.

The remaining USAID APEP budget has been under pressure due to the strengthening of the USH and escalation in costs such as fuel.

| | |
|---|---|
| ***Benchmark 14.2*:** | VAT payment and reimbursement report provided to USAID by 11/17/2006 and 04/16/2007<br>*~ VAT report submitted in November 2006 and April 2007 (100% accomplished).* |

As required by USAID APEP contract Section H.14, in November 2006 and April 2007 Chemonics submitted the final VAT reports for USAID APEP on items exceeding US$500. The report was compiled and submitted by the HO PMU and was based upon charges incurred. On a monthly basis, USAID APEP has submitted VAT reclaim reports to USAID for items less than US$500. To-date, since the commencement of the project, USAID APEP has not received any VAT reimbursement. It is now time-sensitive for the US Government to resolve this matter with GoU since the accumulated receivable in the form of VAT reclaim (projected to be approximately $250,000 over LOP) will be constraining the USAID APEP operating budget.

| | |
|---|---|
| ***Benchmark 14.3*:** | 3rd annual project progress report submitted to USAID by 10/31/2006<br>*~ Report submitted on 10/17/2006 (100% accomplished).* |

The 3rd annual progress report was submitted on 10/17/2006. It covered the period October 2005 to September 2006. Home Office PMU, M&E, POT, SAF and Training resources were

utilized to continue tracking performance indicators. Various extracts of the report were utilized by MEMS and also for IEHA reporting purposes.

| | |
|---|---|
| ***Benchmark 14.4*:** | Semi-annual project progress report submitted to USAID by 4/30/2007<br>*~ This progress report was submitted on 04/26/2007 (100% accomplished).* |

This semi-annual progress report covered the period 10/01/2006 through 03/31/2007. It was prepared with joint input from all the TAs on USAID APEP, reviewed by the USAID CTO and the final version submitted on 04/26/2007.

| | |
|---|---|
| ***Benchmark 14.5*:** | Annual property report submitted to USAID by 10/31/2006<br>*~ Report was submitted on 11/10/2006 (100% accomplished).* |

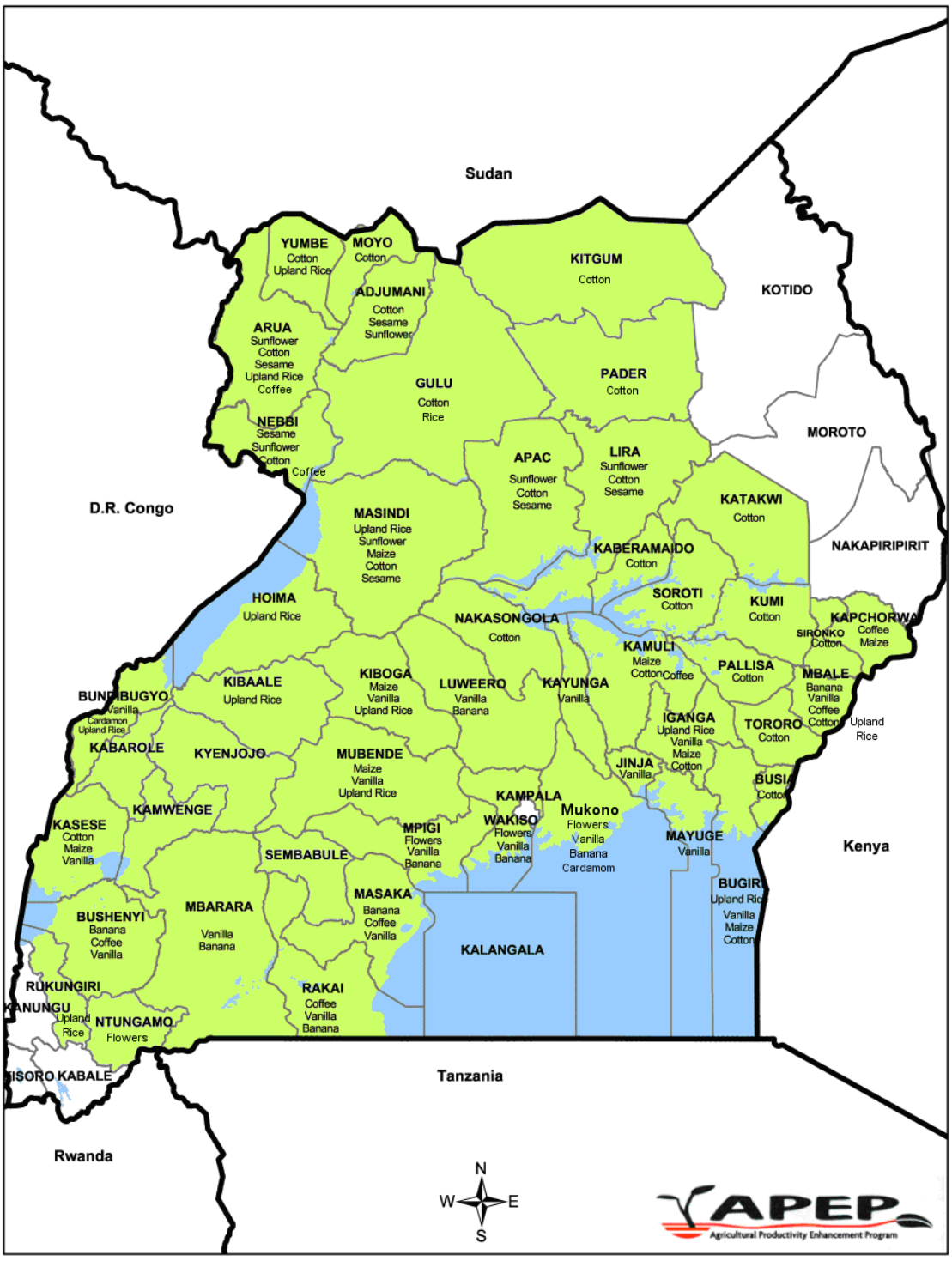
CTO and CO approval is obtained for commodity procurements in excess of US$100,000. As each non-expendable commodity exceeding US$500 in value is procured, it is inventoried according to USAID regulations. This annual property report was submitted on 11/10/2006. The report covered Office items and Expatriate household items. Expatriate household items for Anne Milligan, Daniel de Reuck, Tilahun Zeweldu and Michael Mailloux are stored in 2 ocean containers on leased premises. Some of these items have been dispersed to the residence of Mark Wood residence when there is need for replacements. The compilation and maintenance of the inventory is done by the USAID APEP Operations Manager. USAID APEP project management, the project accountant and the HO PMU also contributed. Procurements were minimal during the reporting period.

| | |
|---|---|
| ***Benchmark 14.6*:** | 5th annual work plan for FY07 submitted to USAID by 9/30/2007<br>*~ Prepared in September 2007 and submitted on 09/26/2007 (100% accomplished).* |

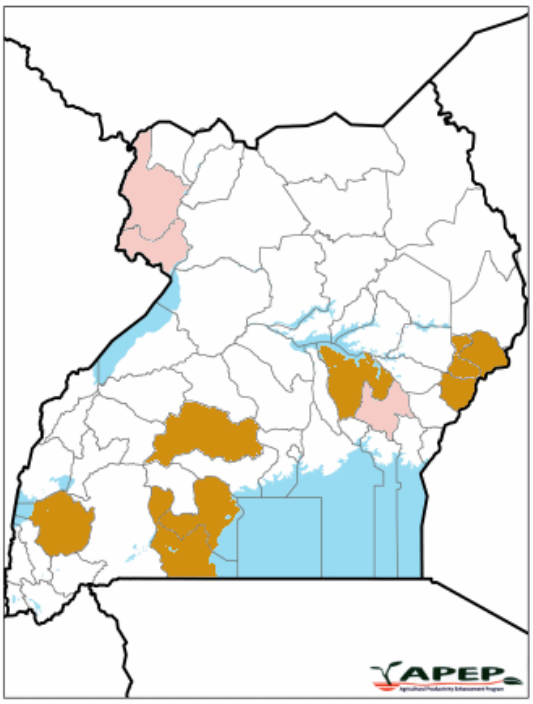
This activity was conducted beginning the week of September 10, 2007. It involved USAID APEP TAs, the USAID CTO, HO PMU, and commodity stakeholder representatives. It was reviewed by the USAID CTO and the final version submitted on 09/26/2007.

# ANNEX A

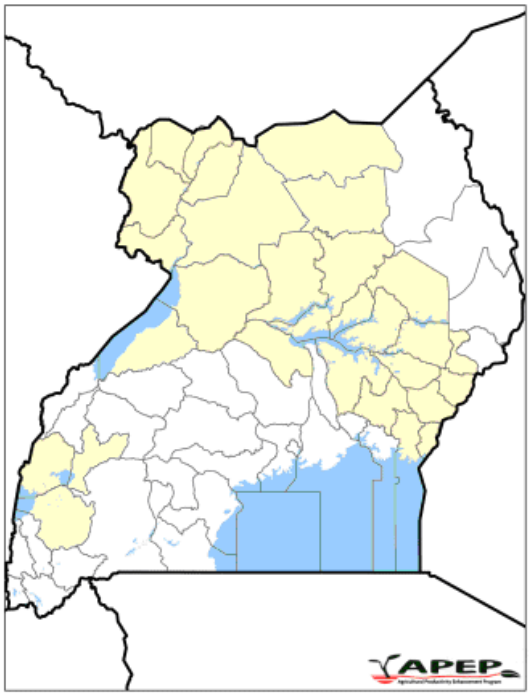
## USAID APEP Commodity Intervention Areas



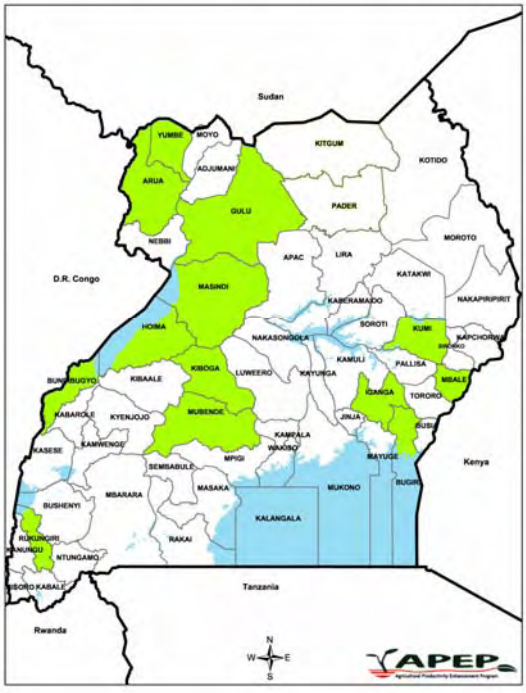
APEP Coffee Intervention Areas



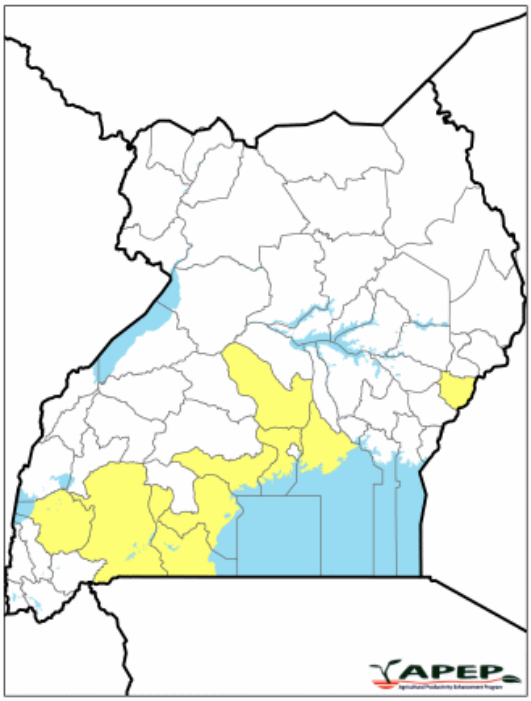
APEP Cotton Intervention Areas



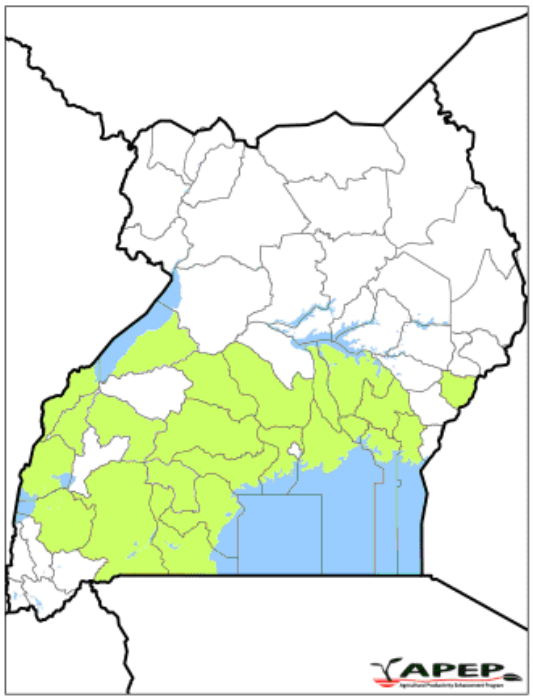
APEP Upland Rice Intervention Areas



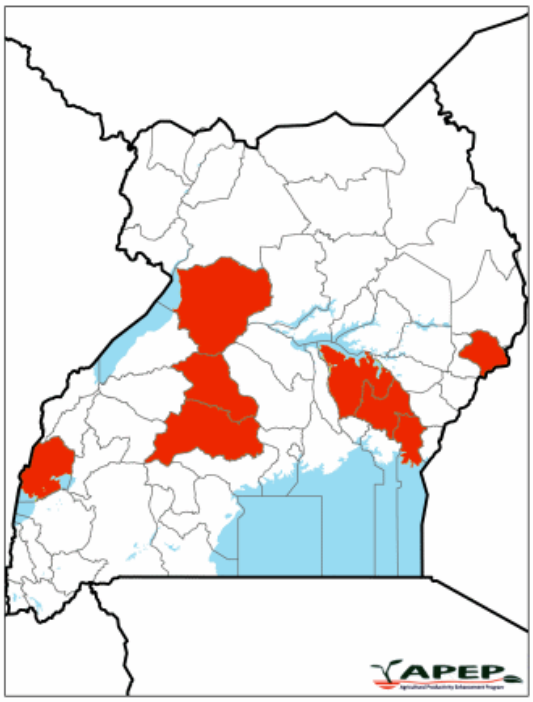

APEP Banana Intervention Areas



**APEP Vanilla Intervention Areas**




**APEP Maize Intervention Areas**




**APEP Sesame and Sunflower Intervention Areas**

## ANNEX B

### USAID APEP PMP Indicator Achievements

| Indicator | Unit of measure | Baseline Value | LOP target | 2003/04 | 2004/05 | 2005/06 | 2006/07 | 2006/07 as % of LOP Target |
|---|---|---|---|---|---|---|---|---|
| Average h/h income of APEP-supported producers (from APEP-supported commodities) | US$ p.a. | **185.45** | **260.00** | **197.49** | **216.70** | **253.70** | **281.37** | 108% |
| % change (over baseline) in h/h income of APEP-supported producers | % | 0 | 40% | 6% | 17% | 37% | 52% | -- |
| # of h/h supported by APEP | No | 0 | 250,000 | 165,000 | 204,603 | 269,494 | 288,954 | 116% |
| # of h/h with disability supported by APEP | No | 0 | 5,000 | 0 | 1,358 | 2,471 | 4,779 | 96% |
| # of on- & off-farm jobs created | No | 0 | 80,000 | 13,347 | 30,219 | 67,901 | 80,214 | 100% |
| # of on- & off-farm enterprises created | No | 0 | 600 | 311 | 495 | 771 | 834 | 139% |
| Total production of APEP-supported crops | | | | | | | | |
| - coffee | mt | 160,000 | 200,000 | 151,383 | 150,113 | 120,139 | 162,255 | 81% |
| - cotton | mt | 29,250 | 64,750 | 30,155 | 46,620 | 18,382 | 23,096 | 36% |
| - sunflower | mt | 10,000 | 40,000 | 10,600 | 16,000 | 25,700 | 28,100 | 70% |
| - rice | mt | 100,000 | 160,000 | 113,000 | 147,000 | 173,000 | 168,000 | 105% |
| - maize | mt | 315,000 | 750,000 | 550,000 | 620,000 | 580,000 | 645,000 | 86% |
| - flowers | mt | 4,424 | 7,000 | 6,284 | 7,286 | 7,596 | 6,631 | 95% |
| - banana | mt | 8,000,000 | 11,000,000 | 8,200,000 | 8,500,000 | 8,350,000 | 9,200,000 | 84% |
| - cured vanilla beans | mt | 135 | 185 | 138 | 75 | 229 | 277 | 150% |
| Yields of APEP-supported crops | | | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| (obtained from adopters) | | | | | | | | |
| - coffee | mt/acre | 0.290 | 0.500 | 0.350 | 0.600 | 0.450 | 0.800 | 160% |
| - cotton | mt/acre | 0.200 | 0.600 | 0.460 | 0.525 | 0.250 | 0.350 | 58% |
| - sunflower | mt/acre | 0.300 | 0.800 | 0.600 | 0.650 | 0.600 | 0.600 | 75% |
| - rice | mt/acre | 0.600 | 1.500 | 0.720 | 1.200 | 1.500 | 1.500 | 100% |
| - maize | mt/acre | 0.550 | 2.000 | 1.500 | 1.500 | 1.600 | 1.750 | 88% |
| - flowers | mt/acre | 11.000 | 15.000 | 12.000 | 12.500 | 13.250 | 13.400 | 89% |
| - banana | mt/acre | 5.850 | 10.000 | 7.260 | 12.000 | 11.760 | 12.000 | 120% |
| - green vanilla beans | mt/acre | 0.250 | 0.400 | 0.250 | 0.300 | 0.350 | 0.375 | 94% |
| Unit cost of production of APEP-supported crops | | | | | | | | |
| - coffee | US$/kg | 0.270 | 0.180 | 0.245 | 0.206 | 0.229 | 0.204 | 88% |
| - cotton | US$/kg | 0.310 | 0.200 | 0.290 | 0.237 | 0.260 | 0.220 | 91% |
| - sunflower | US$/kg | 0.250 | 0.140 | 0.156 | 0.141 | 0.121 | 0.168 | 83% |
| - rice | US$/kg | 0.400 | 0.200 | 0.238 | 0.209 | 0.187 | 0.184 | 109% |
| - maize | US$/kg | 0.080 | 0.060 | 0.072 | 0.065 | 0.066 | 0.069 | 87% |
| - flowers | US$/kg | n.a | n.a | n.a | n.a | n.a | n.a | n.a |
| - banana | US$/kg | 0.030 | 0.020 | 0.027 | 0.022 | 0.013 | 0.017 | 118% |
| - green vanilla beans | US$/kg | 0.700 | 0.550 | 0.633 | 0.626 | 0.650 | 0.625 | 88% |
| Value of targeted commodities marketed by APEP clients | US$ | 106,000,000 | 150,000,000 | 112,448,014 | 122,277,184 | 152,910,800 | 171,281,140 | 114% |
| % change in value of targeted commodities marketed by APEP clients over baseline | % | 0 | 40% | 6% | 15% | 44% | 62% | -- |
| Volume of targeted commodities marketed by APEP clients | mt | 615,000 | 800,000 | 662,972 | 681,411 | 692,014 | 809,704 | 101% |
| % change in volume of targeted commodities marketed by APEP | % | 0 | 30% | 8% | 11% | 13% | 32% | -- |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| clients | | | | | | | | |
| Gross revenue of off-farm enterprises supported by APEP | US$ | 140,000,000 | 225,000,000 | 151,482,439 | 166,340,898 | 212,201,880 | 247,509,250 | 110% |
| % change (over baseline) in gross revenue of off-farm enterprises supported by APEP | % | 0 | 60% | 8% | 19% | 52% | 77% | -- |
| No of input suppliers serving APEP clients | No | 0 | 400 | 177 | 281 | 472 | 497 | 124% |
| No of local credit service points reaching APEP clients | No | 0 | 30 | 8 | 24 | 28 | 33 | 110% |
| Amount of credit provided to APEP-supported clients | US$ | 612,000 | 900,000 | 830,867 | 1,404,485 | 1,953,685 | 2,594,949 | 288% |
| % change in amount of credit provided to APEP clients | % | | 45% | 36% | 129% | 219% | 324% | -- |
| No of APEP-supported firms exporting agricultural products | No | 0 | 100 | 19 | 68 | 74 | 76 | 76% |
| No of agricultural processors supported by APEP | No | 0 | 50 | 20 | 52 | 60 | 61 | 122% |
| Output value of APEP-supported processors | US$ | 65,331,921 | 130,000,000 | 65,331,921 | 87,984,372 | 146,221,505 | 156,350,215 | 120% |
| % change in output value of APEP-supported processors | % | | 100% | 0% | 35% | 124% | 139% | -- |
| No of APEP-supported firms managing outgrower schemes | No | 0 | 25 | 7 | 12 | 12 | 14 | 56% |
| No of farmers involved in APEP-supported outgrower schemes | No | 0 | 125,000 | 12,402 | 29,287 | 51,331 | 147,495 | 118% |
| No of public/private partners developed by APEP | No | 0 | 125 | 29 | 32 | 40 | 83 | 66% |
| Amount of private sector resources leveraged through partnerships | US$ | 0 | 6,000,000 | 1,442,203 | 3,171,332 | 11,580,464 | 12,677,242 | 211% |
| No of Depot committees (DCs) strengthened* | No | 0 | 200 | 30 | 89 | 180 | 212 | 106% |
| No of producer organizations (POs) strengthened by APEP | No | 0 | 200 | 290 | 763 | 1,631 | 3,504 | 1752% |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Average group membership per PO | No | 20 | 40 | 22 | 25 | 27 | 25 | 63% |
| % change in group membership of APEP-supported producer organizations | % | 0 | 100% | 10% | 25% | 35% | 25% | -- |
| No of APEP-supported producers using improved technologies/practices | No | 0 | 150,000 | 81,215 | 105,239 | 170,660 | 189,556 | 126% |
| Area cultivated using improved technologies | acres | 0 | 150,000 | 74,078 | 99,880 | 142,363 | 155,279 | 104% |
| No of key policy/institutional constraints alleviated through APEP intervention | No | 0 | 10 | 0 | 2 | 3 | 3 | 30% |
| No of key policy constraints that have been addressed through APEP intervention | No | 0 | 15 | 2 | 5 | 7 | 7 | 47% |
| No of individuals trained by APEP in disciplines related to private sector agric | No | 0 | 365,000 | 168,107 | 215,864 | 261,881 | 321,713 | 88% |
| No of individuals completing internships with private sector firms through APEP support | No | 0 | 200 | 47 | 97 | 156 | 235 | 118% |
| No of biotech/biosafety regulations improved and in place | No | 0 | 3 | 0 | 1 | 2 | 2 | 67% |
| No of APEP-funded research contracts implemented by public sector bodies | No | 0 | 25 | 4 | 6 | 7 | 9 | 36% |

** The previous indicator about POs has been replaced with the concept of DCs (which is an aggregate of POs)*

# ANNEX C

## USAID APEP Active Client Portfolio

| Client | Commodity | Location/District | Type of assistance offered by APEP |
|---|---|---|---|
| Africa 2000 - Network | Rice | Masaka, Rakai, Sembabule, Apac, Arua, Mubende, Kiboga, Wakiso, Nakasongola and Kaberamaido) | Technical assistance to rice farmers |
| Afro Kai Ltd | Barley | Kabarole, Kasese | Grant and technical assistance |
| Agriserve Ltd | Agro inputs | Nakasongola, Tororo, Mayuge | Credit guarantee |
| AGTL (PLC) | Biotech | Kampala | Technical assistance, linkages |
| Ankole Coffee Processing | Coffee | Ibanda - Mbarara | Finance, training, marketing support |
| Apac District Farmers Association | various | Apac | Technical support under Dutch Partnership |
| Arua District Farmers Association | various | Arua | Technical support under Dutch Partnership |
| Balawoli Cotton Industries | Cotton | Kamuli | Technical assistance, demostration activity support |
| Balton Uganda | Rice and cotton chemicals | Masindi, Iganga | Technical assistance/support in testing new rice chemicals |
| Bank of Africa | Agro inputs | Kampala | Credit guarantee |
| Bank of Baroda | Agro inputs | Kampala | Credit guarantee |
| Bestlines Ltd | Cotton | Tororo | Technical asistance, demonstration activity support |
| Bon Holdings East Africa | Cotton | Busoga sub-region | Training, demonstration activity and technical assistance |
| Bugiri Commercial Farmers Association | Maize, Upland rice | Bugiri | Training /technical assistance/support |
| Busanyi Agro Investment | Coffee | Mpigi | Financial, technical assistance |
| Bushenyi Cotton Company | Cotton | Bushenyi | Training, demonstration activity and technical assistance |
| CARE International | Sesame | Arua, Nebbi | Technical assistance, finance |
| Centenary Bank | Rural Finance | 12 branches (Mbale, Tororo, Mityana, Kyotera, Kasese, Hoima, Lira, Kiboga, Bugiri, Kyenjojo, Mbarara, Ishaka) | Training of bank staff and linkage of farmers |
| CN Cotton Ltd | Cotton | Kachumbala - Kumi | Training, demonstration activity and technical assistance |
| Commercial Micro Finance (CMF) | Rice, rural finance | Bukedea | Technical assistance, linkages |
| COPCOT East Africa | Cotton | West Nile sub-region | Training, demonstration activity and technical assistance |
| Cotton Development Organization | Cotton, biotech | National | Liaison on Cotton Industry, Biotech technology assistance |
| Cotton Network Farmers | Cotton | Kigumba / Masindi | Technical assistance/support and testing of new Rice |
| Dabani Ginnery | Cotton | Busia | Training, demonstration activity and technical assistance |
| DFCU Bank | Rural Finance/Leasing | Kapchorwa, Kampala | Technical Assistance, Credit Guarantee |
| Dunavant | Cotton | Lira | Training, demonstration activity and technical assistance |
| East Africa Seed | Agro inputs | Nakasongola | Credit guarantee |
| East African Maltings (U) Ltd | Barley | Kabarole and Kapchorwa | Technical support and training |
| Ecomax Foods Ltd | Rice | Luwero | Technical assistance, support to demontration activity |
| El-Shaddai | Agro inputs | Tororo, Mbale | Credit guarantee |
| Evergreen International | Agro inputs | Pallisa, Kabale, | Credit guarantee |
| Farmers Voice Newspaper | Biotech | National | Training, communication |
| FICA Seed | All seeds, fertilizers | Masindi, Kasese, Kabarole, Nakasongola, Mayuge, Mubende | Technical assistance, credit guarantee |
| General and Allied | Agro inputs | Mubende, Pallisa, Kabale | Credit guarantee |

| | | | |
|---|---|---|---|
| Harvest Farm Seeds | All seeds | Kampala | Technical assistance |
| IBERO (U) Ltd | Coffee | Kamuli, Masaka (Bigasa) | Finance, training and extension support |
| Iganga Commercial Farmers Association | Maize, Upland rice | Iganga | Training /technical assistance/support |
| IITA | Banana/Coffee | Masaka, Rakai, Bushenyi, Mbarara, Mpigi, Wakiso, Mukono, Luwero, Mbale | Grant and Technical Assistance |
| INIBAP | Banana | Luwero, Mukono | Grant and Technical Assistance |
| Kaberamaido District Farmers Association | various | Kaberamaido | Technical support under Dutch Partnership |
| Kamuli Commercial Farmers Association | Maize, Upland rice | Kamuli | Training /technical assistance/support |
| Kapchorwa Commercial Farmers Association | Maize, Coffee, Barley | Kapchorwa | Training /technical assistance/support |
| Katakwi District Farmer Association | Various | Katakwi | Technical support under Dutch Partnership |
| Kawacom (U) Ltd | Coffee | Bushenyi and Kapchorwa | Training and technical assistance |
| Kaweri Coffee Farmers Alliance | Coffee | Mubende, Kampala | Finance, technical support |
| Keith Associates | Agro Inputs | Kampala | Finance, technical assistance. |
| Kiboga Commercial Farmers Association | Maize, Upland rice | Kiboga | Training /technical assistance/support |
| Kilimanjaro Rice Company | Upland rice | Kampala | Technical assistance |
| Kumi District Farmer Association | Various | Kumi | Technical support under Dutch Partnership |
| Kyagalanyi (U) Ltd | Coffee | Mukono | Grant and technical assistance |
| Lira District Farmer Association | Various | Lira | Technical support under Dutch Partnership |
| Lumino Rice Company | Rice | Pabbo - Gulu | Technical assistance/support and linking to standard loans |
| MAAIF | Biotech, All crops | National | Biotech policy, technical assistance |
| Mega Distillers/Masindi District Farmers Association | Upland rice | Masindi | Technical assistance |
| MFPED | Biotech | Kampala | Training |
| Mt Elgon Seed Co | Agro inputs | Kapchorwa | Credit guarantee |
| MTL (U) Ltd | Coffee | Mbale, Manafa and Sironko | Training and extension support and grant |
| Mubende Commercial Farmers Association | Maize | Mubende | Training /technical assistance/support |
| MUK | All APEP commodities, biotech | Kampala | Training, capacity building |
| Mukwano Agro Projects | Sunflower | Lira, Apac, Masindi | Technical assistance and finance |
| Mutuma Commercial Agencies | Cotton | Iganga | Technical assistance, support to demontration activity |
| NAADS | Rice | Country-wide | Technical assistance/support |
| NARO | All APEP commodities, biotech | Wakiso, Soroti, Mukono, national | Finance, training, capacity building |
| NASECO Seed | Field crop seeds | Kibaale, Mayuge, Pallisa | Technical assistance, credit guarantee |
| NBC | Biotech/Biosafety | National | Training, technical assistance |
| North Bukedi Cotton Company | Cotton | Mbale / Pallisa | Training, demonstration activity and technical assistance |
| Northern Uganda Organic Producers and Processors Association | Cotton, sesame | Northern Uganda | Technical asistance and support to demonstration activity |
| Novo Enterprises | Cotton | Tororo | Training, demonstration activity and technical assistance |
| Northern Uganda Eco Organics (NUECO) | Cotton (Organic)/ Sesame | Northern Uganda | Training, demonstration activity and technical assistance |
| Nyakatonzi Coop Union | Cotton | Kasese | Training, demonstration activity and technical assistance |
| Nyati Rice Millers | Upland rice | Hoima | Training/support for demonstration activity |

| | | | |
|---|---|---|---|
| Office of Vice President | Rice | Luwero, Rukungiri, Bundibugyo, Kyenjojo | Technical assistance/support |
| Olam (U) Ltd | Coffee, rice, sesame, cotton | Rakai, Nakaseke | Financial, technical assistance |
| Outspan Enterprises Ltd | Sesame | Lira, Kaberamaido, Apac | Technical assistance and finance |
| Pearl Flowers | Flowers | Ntungamo | Grant and Technical Assistance |
| Pramukh Agro Industries | Cotton | Busembatya - Iganga | Training, demonstration activity and technical assistance |
| Rafiki Cotton Industry | Cotton | Lira | Technical assistance, support to demontration activity |
| Roka Ale Trading Company Ltd | Sesame | Nebbi, Arua, Yumbe, Moyo | Technical assistance and finance |
| Rwenzori Upland Rice Company | Upland rice | Kabarole | Technical assistance |
| Rwenzori Vanilla Association | Cardamom, vanilla | Bundibigyo | Grant and technical assistance |
| Rwenzori Vanilla Project Development Association (RVDPA) | Cardamom & Vanilla | Bundibugyo | Grant and technical assistance |
| Rwimi Commercial Upland Rice Processing | Upland rice | Kabarole | Technical assistance |
| Sanyu Agro Industries Ltd | Sunflower | Nebbi | Grant and technical assistance |
| Savannah | Upland rice | Masindi | Outgrower, technical assistance, finance |
| Shares! (U) Ltd | Sesame | Lira, Apac | Technical assistance, finance |
| Singh Farmers Ltd | Rice | Pakanyi / Masindi | Technical assistance |
| SOMED | Upland rice | Masindi | Technical assistance and demonstration support |
| Soroti District Farmer Association | Various | Soroti | Technical support under Dutch Partnership |
| South Base Agro Industries | Cotton | Tororo | Training, demonstration activity and technical assistance |
| Stanbic Bank | Rural Finance | Kapchorwa, Kampala | Technical Assistance, Credit Guarantee |
| Standard Chartered Bank (SCB) | Rural Finance | Kampala | Technical assistance and linkage of farmers |
| Sunrise | Upland rice | Kabarole | Outgrower, technical assistance, finance |
| Support Organization for Micro Enterprises Development (SOMED) | Rice | Masindi | Technical assistance/support |
| Tilda | Upland rice | Bugiri | Outgrower, technical assistance, finance |
| Twiga Chemicals | Agro Inputs | Kampala | Technical assistance, marketing support |
| Uchumi Commodities | Upland Rice, fertilizers | Various | Upland rice production project development, linkages |
| UFEA | Flowers & Cuttings | Kampala, Wakiso, Mpigi, Mukono | Grant, technical assistance, training and research |
| Ugacof Ltd | Coffee | Kamuli, Iganga, Masaka | Grant and technical assistance |
| Uganda Breweries Ltd | Barley | Kapchorwa, Kampala, Kabarole | Technical assistance, finance |
| Uganda Coffee Development Authority (UCDA) | Coffee | National | Coffee Industry support |
| Uganda Crop Industries | Cardamom, Vanilla | Lugazi - Mukono | Grant and technical assistance |
| Uganda Ginners & Cotton Exporters Association (UGCEA) | Cotton | Kampala | Liaison on Cotton Industry |
| Uganda Upland Rice Miller Ltd | Upland rice | Jinja | Technical assistance |
| UNADA | Agro-inputs | Kampala | Technical assistance, credit guarantee scheme |
| UNBS | Biotech | Kampala | Food safety, biosafety, training |
| UNCST | Biotech | National | Biotech policy, training and finance |
| UNEX (U) Ltd | Coffee | Bushenyi | Training and extension support |
| USTA | Seeds | Kampala | Technical assistance |
| VANEX | Vanilla | Kampala | Grant, training, and extension support |

| | | | |
|---|---|---|---|
| Victoria Seeds | All seeds | Kampala | Finance, technical assistance |
| Western Uganda Cotton Company | Cotton | Masindi | Training, demonstration activity and technical assistance |
| Xclusive Cuttings | Cut/Pot Plants & Fruits, coffee tissue culture | Mairye - Wakiso | Grant |
| Yumbe District Farmers Association | Sesame | Yumbe | Technical support under Dutch Partnership |

# ANNEX D

## USAID APEP Supported Training Events

### OCTOBER 2006 TO MARCH 2007

| Commodity | Location | Type of training | Target Audience | Number of participants trained | | | Training Purposes |
|---|---|---|---|---|---|---|---|
| | | | | Total | Males | Females | |
| Banana | Busangayi II | Field day | Banana farmers | 28 | 20 | 8 | Improved banana productivity |
| Banana | Bushenyi | Workshop | Banana farmers and traders | 65 | 51 | 14 | Improvement of banana productivity |
| Banana | Bushikwa | Field day | Banana farmers | 29 | 18 | 11 | Improved banana productivity |
| Banana | Manafa | Field day | Banana farmers | 39 | 21 | 18 | Improved banana productivity |
| Banana | Manafa | Seminar | Banana farmers and traders | 135 | 75 | 60 | Improved banana productivity |
| Banana | Masaka | Workshop, tour | Banana farmers | 201 | 85 | 116 | Improved banana productivity |
| Banana | Masaka | Tour | Banana farmers | 219 | 99 | 120 | Improved banana productivity |
| Banana | Masaka | Workshop, Seminar | Banana farmers and traders | 164 | 53 | 111 | Improved banana productivity |
| Banana | Masaka | Field day | Banana farmers and traders | 177 | 83 | 94 | Improved banana production and marketing |
| Banana | Masaka | Field day | Banana farmers and traders | 115 | 53 | 62 | Improved banana production and marketing |
| Banana | Mbale | Workshop | Banana farmers | 243 | 151 | 92 | improve management practices |
| Banana | Mbarara | Workshop | Banana farmers | 89 | 51 | 38 | Improved banana production and productivity |
| Banana | Mbarara | Field day | Banana farmers and traders | 84 | 54 | 30 | Improved banana production and productivity |
| Banana | Mpigi | workshop, field day | Banana farmers | 93 | 36 | 57 | Improved banana production and productivity |
| Banana | Rakai | Workshop | Banana farmers | 161 | 78 | 83 | Improved banana productivity and credit linkage |
| Banana | Rakai | Workshop | Banana farmers | 88 | 52 | 36 | Improved banana productivity and credit linkage |
| Banana | Rakai | Workshop | Banana farmers and traders | 174 | 78 | 96 | Improved banana production/productivity and soil and diseases management |

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|---|---|---|---|---|---|---|---|
| Banana | Rakai | Workshop | Banana farmers and traders | 106 | 44 | 62 | Improved banana production and productivity |
| Banana | Rakai | Workshop | Banana farmers | 90 | 34 | 56 | Improved banana production and productivity |
| Banana | Rakai | Workshop | Banana farmers and traders | 164 | 79 | 85 | Improved banana production and productivity |
| Banana | Rakai | Workshop | Banana farmers | 129 | 60 | 69 | Improved banana production and productivity |
| Banana | Rakai | Field day | Banana farmers and traders | 86 | 35 | 51 | Improved banana production and productivity |
| Banana | Wakiso | Workshop | Banana farmers | 118 | 50 | 68 | Improved banana production and productivity |
| Barley | Kapchorwa | Workshop | Lead farmers | 68 | 58 | 10 | Enhancement of barley productivity |
| Barley | Kapchorwa | Field day | Collaborating farmers | 2,066 | 1,578 | 488 | Enhancement of barley productivity |
| Sesame | Nebbi | Workshop | Depot committee members, training coordinators | 13 | 13 | 0 | Enhancement of sesame productivity through POs |
| Sesame | Yumbe | Field day | Area and site coordinators | 17 | 16 | 1 | Enhancement of sesame productivity |
| Sunflower | Apac | Field day | Site coordinators | 12 | 12 | 0 | Enhancement of sunflower productivity |
| Sunflower | Apac | Workshop | Site coordinators | 12 | 11 | 1 | Enhancement of sunflower productivity |
| Sunflower | Lira | Field day | Site coordinators | 22 | 21 | 1 | Enhancement of sunflower productivity |
| Sunflower | Apac | Workshop | Site coordinators | 16 | 15 | 1 | Enhancement of sunflower productivity |
| Sunflower | Nebbi | Workshop/seminar | Depot committee training coordinators | 8 | 6 | 2 | Enhancement of sunflower productivity through POs |

## APRIL TO SEPTEMBER 2007

| Commodity | Location | Type of training | Target Audience | Number of participants trained | | | Training Purposes |
|---|---|---|---|---|---|---|---|
| | | | | Total | Males | Females | |
| Cotton | Iganga | Workshop | Site Coordinators & Area Coordinators | 77 | 77 | 0 | Improving cotton production |
| Cotton | Nebbi /Arua | Workshop | Site Coordinators & Area Coordinators | 59 | 59 | 0 | Improving cotton production |
| Cotton | Kasese | Workshop | Site Coordinators & Area Coordinators | 67 | 63 | 4 | Improving cotton production |
| Cotton | Masindi | Workshop | Lead Farmers, Site Coordinators & Area Coordinators | 71 | 68 | 3 | Improving cotton production |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Cotton | Kumi | Workshop | Site Coordinators & Area Coordinators | 101 | 98 | 3 | Marketing good quality cotton |
| Cotton | Kumi | Workshop | Site Coordinators & Area Coordinators | 148 | 146 | 2 | Marketing good quality cotton |
| Cotton | Pallisa | Workshop | Field officers, Lead farmers & Area Coordinators | 64 | 60 | 4 | Marketing good quality cotton |
| Cotton | Busia | Workshop | Field officer & Area Coordinators | 19 | 19 | 0 | Improved on cotton production and management |
| Cotton | Lira | Workshop | Field officers & Area Coordinators | 32 | 29 | 3 | Improved on cotton production and management |
| Cotton | Hoima | Workshop | Field officers, Lead Farmers & Area Coordinators | 96 | 95 | 1 | Marketing good quality cotton |
| Banana | Kamuli | Workshop | Lead farmers and adopting farmers | 16 | 8 | 8 | Ensuring food security through increased food production |
| Banana | Bukalango | Workshop | Leaf farmers and adopting farmers | 13 | 5 | 8 | Ensuring food security through increased food production |
| Banana | Ddambwe | Workshop | Adopting farmers | 16 | 10 | 6 | Ensuring food security through increased food production |
| Banana | Nakatete, Masaka | One day training | Banana Farmers | 8 | 4 | 4 | Improved banana production and management |
| Banana | Nkalwe, Masaka | One day Training | Banana Farmers | 10 | 6 | 4 | Improved banana production and management |
| Banana | Nakatete, Masaka | One day training | Banana Farmers | 12 | 6 | 6 | Improved banana production and management |
| Banana | Masaka | Field day training | Banana Farmers | 6 | 0 | 6 | Identifying and controlling pests and diseases |
| Banana | Kasas East Masaka | Training | Banana Farmers | 14 | 2 | 12 | Identifying and controlling pests and diseases |
| Banana | Misenyi Masaka | Training | Banana Farmers | 8 | 6 | 2 | Soil conservation |
| Banana | Kyankoko Masaka | Training | Banana Farmers | 15 | 8 | 7 | Identifying and controlling pests and diseases |
| Banana | Rakai | Training | Banana Farmers | 240 | 132 | 108 | Improve banana production and management |
| Banana | Mabanda Mpigi | Farmer Training | Farmers group growing Bananas and Youth | 15 | 6 | 7 | Improve banana production and management |
| Banana | Kalagala Luweero | Workshop/Seminar | Banana Farmers | 6 | 3 | 3 | Improve banana production and management |
| Banana | Kalamba Mpigi | Farmers visits / group training / discussion | Youth women and men | 16 | 7 | 9 | Improve banana production and management |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Banana | Kalamba Mpigi | Farm visits group training / discussion | Youth women and men | 16 | 9 | 7 | Improve banana production and management |
| Banana | Kacmce | Farm visits group training / discussion | Farmers (Banana) | 16 | 13 | 3 | Improve banana production and management |
| Banana | Bugaara Bushenyi | Farm visits group training / discussion | Farmers | 16 | 15 | 1 | Improve banana production and management |
| Banana | Bugaara Bushenyi | Farm visits group training / discussion | Farmers coffee farmers | 27 | 22 | 5 | Improve banana production and management |
| Banana | Kalamba Mpigi | Farm visits group training / discussion | Women, Youth and Men | 15 | 4 | 11 | Improve banana production and management |
| Banana | Luweero | Farm visits group training / discussion | Farmers | 9 | 7 | 2 | Improve banana production and management |
| Banana | Makukubita luweero | Farm visits group training / discussion | Farmers | 16 | 9 | 7 | Improve banana production and management |
| Banana | Kigyendwa Mbarara | Workshop | Farmers | 11 | 5 | 6 | Improve banana production and management |
| Banana | Masaka | Seminar | Farmers | 73 | 32 | 41 | Improve banana production and management |
| Banana | Lwemiriti Masaka | Training | Lwemiriti Apep group Farmers | 9 | 3 | 6 | Identifying and controlling BBW |
| Banana | Kyansi Masaka | One day training | Banana Farmers | 10 | 3 | 7 | Improve banana production and management |
| Barley | Kapchorwa | Workshop | Collaborating farmers | 3,000 | 2,312 | 688 | Improve banana production and management |
| Barley | Kapchorwa | Workshop | Collaborating farmers | 3,100 | 2,396 | 704 | Improving productivity and grain quality |
| Barley | Nebbi | Workshop | Collaborating farmers | 1,000 | 869 | 131 | Improving productivity and grain quality |
| Sesame | Nebbi | Workshop | Lead farmers | 529 | 427 | 102 | Improving productivity and grain quality |
| Sesame | Nebbi | Workshop | Depot Committee Training Coordinators | 15 | 14 | 1 | Improving productivity and grain quality |
| Sunflower | Lango | Workshop | Commercial / collaborating farmers | 461 | 461 | 45 | Improving productivity and grain quality |
| Sunflower | Nebbi | Workshop | Depot Committee Trading Coordinators | 10 | 8 | 2 | Improving productivity and grain quality |
| Cotton | Tororo | Workshop | Field officers, lead farmers & Area Coordinators | 61 | 59 | 2 | Marketing good quality cotton |
| Cotton | Kasese | Workshop | Field officers, lead farmers and Area Coordinators | 220 | 201 | 19 | Marketing good quality cotton |
| Barley | Kapchorwa | Workshop | Lead farmers | 75 | 70 | 5 | Institutional development |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Cotton | Kasese | Workshop | Field officers, site coordinators, Area Coordinators | 55 | 48 | 7 | Improved cotton production and management |
| Cotton | Kasese | Workshop | Site Coordinators & Area Coordinators | 47 | 45 | 2 | Pest control management |
| Cotton | Nebbi | Workshop | Site coordinators & Area Coordinators | 41 | 39 | 2 | Pest control management |
| Cotton | Mbale | Workshop | Site coordinators | 34 | 34 | 0 | Pest control management |
| Cotton | Tororo | Workshop | Site Coordinators & Area Coordinators | 37 | 36 | 1 | Pest control management |
| Cotton | Masindi | Workshop | Site Coordinators & Area coordinators | 47 | 45 | 2 | Pest control management |
| Cotton | Iganga | Workshop | Site coordinators & Area Coordinators | 35 | 35 | 0 | Pest control management |
| Cotton | Mbale | Workshop | Pest management | 14 | 14 | 0 | Pest control management |
| Cotton | Tororo | Workshop | Site coordinators & Area coordinators | 86 | 82 | 4 | Improved cotton production and management |
| Cotton | Pallisa | Workshop | Site coordinators & Area Coordinators | 60 | 55 | 5 | Improved cotton production and management |
| **TOTAL NUMBER TRAINED (OCTOBER 2006 TO SEPTEMBER 2007)** | | | | **15,408** | **11,379** | **4,029** | |

# ANNEX E

## USAID APEP SAF Tracker

| No. | Client Name | Activity Description | Activity Duration Start date | Activity Duration End date | Agreement Amount (USH) | Agreement Amount (USD) | Cost-Share Amount (USD) | Agreement Amount Remaining (USH) | Agreement Amount Remaining (USD) |
|---|---|---|---|---|---|---|---|---|---|
| 1 | New Vision - RFP cotton sprayer solicitation | RFP solicitation for hand-held pesticide sprayers to be used in the cotton industry. Advert appeared in the New Vision on April 1, 2004. | 01-Apr-04 | 01-Jul-04 | 569,410 | | $0 | completed | |
| 2 | New Vision - vanilla promotion | Vanilla industry promotion appearing in New Vision vanilla supplement. Other contributors to the supplement included VANEX, ESCO, and UCIL. | 07-Jun-04 | 07-Jun-04 | 1,920,000 | | $1,450 | completed | |
| 3 | Fisheries Resources Research Institute (FIRRI) | Commercialization of aquaculture through research activities on Nile perch, Nile tilapia & Cage culture. This program was cost-shared with ADB and NARO. | 1-May-04 | 31-Oct-04, extended to 31-Dec-04 | 189,379,500 | | $58,947 | completed | |
| 4 | Uganda Crop Industries Limited (UCIL) | Cardamom development and distribution of 249,900 seedlings in Mukono and Bundibujyo. | 1-May-04 | 31-Dec-05 | | $99,960 | $412,665 | | completed |
| 5 | Micron Sprayers Limited | Procurement of 6,000 ultra low volume handheld spinning disc sprayers for use in the cotton industry. | 20-Apr-04 | 20-Apr-05 | | $243,060 | $0 | | completed |
| 6 | Mukwano A.K.Oils & Fats (U) Ltd | Establishment and maintenance of 600 sunflower demonstration sites for increased production and improved technology transfer in the Northern region. The districts impacted include Lira, Apac and Masindi. | 1-May-04 | 30-Sep-04 | 89,484,000 | | $21,764 | completed | |
| 7 | COPCOT (E.A) Ltd | Establishment and maintenance of 850 cotton demonstration sites for increased production and improved technology transfer in the West Nile region. The districts impacted include Arua, Nebbi, Yumbe, Moyo and Adjumani. | 1-May-04 | 28-Feb-05 | 119,423,100 | | $71,920 | completed | |
| 8 | Dunavant Uganda Ltd | Establishment and maintenance of 1500 cotton demonstration sites for increased production and improved technology transfer in the Northern region. The districts impacted include Lira, Nakasongola, Apac, Gulu, Kitgum and Pader. | 1-May-04 | 28-Feb-05 | 174,469,500 | | $137,215 | completed | |
| 9 | Bon Holdings Ltd | Establishment and maintenance of 720 cotton demonstration sites for increased production and improved technology transfer in the Busoga region. The districts impacted include Iganga, Bugiri, Kamuli and Mayuge. | 1-May-04 | 28-Feb-05 | 95,768,640 | | $60,912 | completed | |
| 10 | North Bukedi Cotton Company Ltd | Establishment and maintenance of 1300 cotton demonstration sites for increased production and improved technology transfer in the Eastern region. The districts impacted include Pallisa, Mbale and Sironko. | 1-May-04 | 28-Feb-05 | 151,206,900 | | $112,853 | completed | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 11 | COTTCO (U) Ltd | Establishment and maintenance of 500 cotton demonstration sites for increased production and improved technology transfer in the Mid-Western region. The districts impacted include Masindi, Hoima and Kiboga. | 1-May-04 | 28-Feb-05 | 66,156,500 | | $43,405 | completed | |
| 12 | Nyakatonzi Co-operative Union Ltd | Establishment and maintenance of 950 cotton demonstration sites for increased production and improved technology transfer in the Southwestern region. The districts impacted include Kasese, Kyenjojo, Bushenyi and Rukungiri. | 18-Jun-04 | 30-Apr-05 | 110,498,300 | | $82,470 | completed | |
| 13 | Novo Enterprises Ltd | Establishment and maintenance of 300 cotton demonstration sites for increased production and improved technology transfer in the Eastern region. The districts impacted include Tororo and Busia. | 1-May-04 | 28-Feb-05 | 34,893,900 | | $26,043 | completed | |
| 14 | C.N.Cotton Ltd | Establishment and maintenance of 440 cotton demonstration sites for increased production and improved technology transfer in Eastern region. The districts impacted include Kumi, Soroti and Katakwi. | 1-May-04 | 28-Feb-05 | 51,177,720 | | $38,196 | completed | |
| 15 | Xclusive Cuttings (U) Ltd | Conduct research and trials of 50 different cut plants, potted plants, garden plants, and fruits to determine new varieties for commercial production in Uganda. | 20-May-04 | 1-Jun-05 | | $86,767 | $90,950 | - | completed |
| 16 | Banana Bacterial Wilt campaign | Production and distribution of 90,000 posters and brochures for the dissemination of information about Banana Bacterial Wilt throughout Uganda. This activity was cost-shared through a working group comprised of Eco-Trust, ASPS II, NAADS, and MAAIF. | 2-Sep-04 | 30-Jun-05 | 23,281,250 | | $62,778 | - | completed |
| 17 | Uganda Flower Exporters Association (UFEA) | Strengthening of the floriculture industry by supporting 1) a UFEA research and training specialist 2) the Applied Tropical Floriculture Course 3) the implementation of IPM spider mite control in roses. | 7-Jun-04 | 31-Aug-07 | | $188,635 | $75,240 | - | $4,802 |
| 18 | International Food Policy Research Institute (IFPRI) | Conduct research and database analysis of improved banana production and technologies in Uganda and East Africa. | 24-May-04 | 28-Feb-05 | | $50,000 | $0 | - | completed |
| 19 | Ibero (Uganda) Ltd | Establishment of an integrated out grower scheme with 3,000 coffee farmers in Masaka and Kamuli. The sustainability program will improve production technologies, increase quality, and build producer-market alliances. | 24-May-04 | 01-Jun-05 | | $45,840 | $68,000 | - | completed |
| 20 | Mukwano A.K.Oils & Fats (U) Ltd Season B 2004 | Expansion of technology transfer program to include 1000 sunflower demonstration sites and 200 sesame demonstration sites in the Northern region. The districts impacted include Lira, Apac and Masindi. | 01-Jul-04 | 31-Dec-05 | 65,308,600 | | $127,500 | completed | |
| 21 | Uganda National Council for Science and Technology (UNCST) | Establishment of the Biosafety Desk Office and Biosafety Desk Officer. The Office will plan for the development of biosafety in Uganda, coordinate national biosafety activities, and provide information on international and national development trends in biosafety. | 01-Aug-04 | 31-Dec-07 | | $86,943 | $0 | - | $30,008 |
| 22 | The Association of the Vanilla Exporters of Uganda (VANEX) | Strengthening of the vanilla industry through the establishment and maintenance of 60 demonstration gardens, a comprehensive training program, public education campaign, and export marketing support. | 01-Nov-04 | 30-Nov-07 | 390,100,190 | | $81,122 | 24,807,217 | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 23 | International Foundation of Organic Agriculture Movements (IFOAM) | Sponsorship of the international organic coffee conference in Entebbe. Compilation and publication of the conference proceedings and presentations. The IFOAM conference was sponsored with support from UCDA, EPOPA, CTA, SIDA, and corporate contributors. | 13-Aug-04 | 31-Oct-04 | | $5,000 | $333,918 | - | completed |
| 24 | Sai Farms | Conduct an Environmental Impact Assessment on flower farm for NEMA clearance and certification. | 29-Sep-04 | 15-Nov-04 | 3,600,000 | | $2,000 | completed | |
| 25 | Serere Agricultural and Animal Research Institute (SAARI) | Evaluation, identification, and introduction of high yielding sunflower hybrids for production in Uganda. | 5-Jan-05 | 31-May-06 | 21,816,000 | | $7,397 | completed | |
| 26 | Uganda Breweries Ltd. | Establishment of 64 barley demonstration plots. Supply technologies for production and processing, exposing at least 1600 farmers to improved technologies. | 14-Mar-05 | 28-Feb-06 | 11,280,000 | | $65,709 | completed | |
| 27 | Uganda Grain Traders Ltd | Training in maize for 500 farmers in the 6 districts of Mubende, Kiboga, Kamuli, Iganga, Bugiri and Kapchorwa. | 21-Mar-05 | 20-Mar-06 | 20,160,000 | | | completed | |
| 28 | Savannah Commodities Ltd. | Establishment of 100 Upland Rice demonstration plots in Masindi district. Train 2000 farmers in Upland Rice extension services and management. | 24-Mar-05 | 28-Feb-06 | 31,640,000 | | $410,266 | completed | |
| 29 | Sunrise Commodities and Millers Ltd. | Establishment of 170 Upland Rice demonstration plots in Kabarole district. Train 2500 farmers in Upland Rice extension services and management using improved technologies/practices. | 24-Mar-05 | 28-Feb-06 | 43,961,400 | | $568,636 | completed | |
| 30 | Rwenzori Vanilla Association Project | Training in cardamom growing for 700 farmers in Bundibugyo district. Development of cardamom training manual for use during the 40 district-wide workshops. | 1-Apr-05 | 30-Jun-06 | 12,580,000 | | $6,012 | completed | |
| 31 | Ankole Coffee Processors Ltd | Training 600 farmers in coffee production using improved technologies and methods. Maintain 32 demonstration plots in Ibanda district. | 2-Jun-05 | 28-Feb-07 | 89,028,000 | | $42,529 | completed | |
| 32 | A.K.Oils & Fats (U) Ltd | Establishment and maintenance of 1,700 sunflower demonstration sites for increased production and improved technology transfer in the Northern & Eastern regions. The districts impacted include Lira, Apac, Masindi and Sironko. | 23-May-05 | 1-Jan-06 | 89,005,000 | | $84,482 | completed | |
| 33 | COPCOT (E.A) Ltd | Establishment and maintenance of 855 cotton demonstration sites for increased production and improved technology transfer in the West Nile region. The districts targeted include Arua, Nebbi, Yumbe, Moyo and Adjumani. | 17-May-05 | 28-Feb-06 | 70,357,500 | | $68,020 | completed | |
| 34 | Dunavant Uganda Ltd | Establishment and maintenance of 1,440 cotton demonstration sites for increased production and improved technology transfer in the Northern region. The districts targeted include Lira, Nakasongola, Apac, Gulu, Kitgum and Pader. | 23-May-05 | 28-Feb-06 | 111,015,000 | | $110,989 | completed | |
| 35 | Bon Holdings Ltd | Establishment and maintenance of 680 cotton demonstration sites for increased production and improved technology transfer in the Busoga region. The districts targeted include Iganga, Bugiri, Kamuli and Mayuge. | 17-May-05 | 28-Feb-06 | 51,273,000 | | $59,483 | completed | |
| 36 | North Bukedi Cotton Company Ltd | Establishment and maintenance of 1,170 cotton demonstration sites for increased production and improved technology transfer in the Eastern region. The districts targeted include Pallisa, Mbale and Sironko. | 23-May-05 | 28-Feb-06 | 81,315,000 | | $96,794 | completed | |

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|---|---|---|---|---|---|---|---|---|---|
| 37 | COTTCO (U) Ltd | Establishment and maintenance of 675 cotton demonstration sites for increased production and improved technology transfer in the Mid-Western region. The districts targeted include Masindi, Hoima and Kiboga. | 17-May-05 | 28-Feb-06 | 55,822,500 | | $49,057 | completed | |
| 38 | Nyakatonzi Co-operative Union Ltd | Establishment and maintenance of 810 cotton demonstration sites for increased production and improved technology transfer in the Southwestern region. The districts targeted include Kasese, Kyenjojo, Bushenyi and Rukungiri. | 1-Jun-05 | 30-Apr-06 | 64,179,000 | | $67,011 | completed | |
| 39 | Novo Enterprises Ltd | Establishment and maintenance of 540 cotton demonstration sites for increased production and improved technology transfer in the Eastern region. The districts targeted include Tororo and Busia. | 17-May-05 | 28-Feb-06 | 44,658,000 | | $36,531 | completed | |
| 40 | C.N.Cotton Ltd | Establishment and maintenance of 630 cotton demonstration sites for increased production and improved technology transfer in Eastern region. The districts targeted include Kumi, Soroti and Katakwi. | 17-May-05 | 28-Feb-06 | 51,750,000 | | $50,291 | completed | |
| 41 | International Institute of Tropical Agriculture (IITA) | Increasing Profitability of bananas in Uganda through Improved agronomic management. Identify opportunities and constrains for improvement of Banana-Coffee intercropping systems and Enhancing banana productivity by disseminating new hybrids to farmers. | 1-Oct-05 | 31-Mar-08 | 296,210,701 | | $189,182 | 159,739,576 | |
| 42 | International Network for the Improvement of Banana & Plantain (INIBAP) | Assessing Banana Bacterial Wilt Control Options | 1-Oct-05 | 28-Feb-07 | 48,189,000 | | $31,168 | completed | |
| 43 | Kawacom (U) Ltd. | Convert 2,000 farmers over the 2 ½ years project period in the Bushenyi District from their traditional method of dry production to supplying red cherries for wet processing. | 16-Dec-05 | 15-May-08 | 178,250,000 | | $344,476 | 85,507,894 | |
| 44 | Pearl Flowers Ltd. | Establishment of a new farm at a higher altitude using the new Hydroponics technology for cultivating cut flowers (roses). | 16-Dec-05 | 31-Dec-07 | 179,190,000 | | $6,285,585 | 23,892,000 | |
| 45 | Ibero (Uganda) Ltd - 2006/2008 | Increasing coffee production in the Bigasa Sub county, Masaka district and Kisozi sub county in Kamuli. The project targets 3,000 small holder coffee farmers in Bigasa and 3,500 small holder coffee farmers in Kisozi. | 1-Apr-06 | 31-Mar-08 | 179,860,000 | | $142,820 | 81,276,740 | |
| 46 | Main Traders Ltd (MTL) | Introduction of Coffee washing stations, coffee drying technologies, establishment of coffee demo plots, training of trainers in Mbale, Sironko and Manafa Districts | 1-Apr-06 | 31-Mar-08 | 179,791,200 | | $682,155 | 72,677,732 | |
| 47 | Olam Uganda Limited | Transfer of best agronomic practices and initiation of direct market linkages for farmer organizations and; ultimately lead to registration of Utz Kapeh certification of 3,000 coffee farmers in Nakaseke district | 1-Apr-06 | 31-Mar-08 | 179,104,000 | | $99,723 | 116,446,090 | |
| 48 | NKG Coffee Alliance Trust | Empowering farmer groups to take responsibility for the primary level of marketing of their own coffee; training in post harvest operations; increasing value of their coffee through washed coffee and encourage farmers take responsibility for the correct quality enhancement procedures in Mubende District | 1-Apr-06 | 31-Mar-08 | 179,188,000 | | $101,067 | 83,729,235 | |

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| 49 | Uganda Breweries Ltd. (2006/7) | Barley Production in Kabarole and Kapchorwa Districts | 1-Apr-06 | 31-Mar-07 | 41,823,000 | | $14,253 | completed | |
| 50 | Promain Ingenieria Ltda. | Procurement of 2 Mobile Coffee Wet Processors for use in the coffee industry. | 6-Jun-06 | 31-Aug-06 | | $34,500 | | | completed |
| 51 | Dunavant Uganda Ltd (2006/7) | Establishment and maintenance of 200 cotton demonstration sites for increased production and improved technology transfer in Nakasongola district and Northern Uganda Support to IDP production of good crops and cotton | 4-May-06 | 28-Feb-07 | 75,385,000 | | $12,001 | completed | |
| 52 | Bon Holdings Ltd (2006/7) | Establishment and maintenance of 800 cotton demonstration sites for increased production and improved technology transfer in the Busoga region. The districts impacted include Iganga, Bugiri, Kamuli and Mayuge. | 4-May-06 | 28-Feb-07 | 53,440,000 | | $47,871 | completed | |
| 53 | North Bukedi Cotton Company Ltd (2006/7 | Establishment and maintenance of 1000 cotton demonstration sites for increased production and improved technology transfer in the Eastern region. The districts impacted include Pallisa, Mbale and Sironko. | 4-May-06 | 28-Feb-07 | 66,800,000 | | $59,838 | completed | |
| 54 | Western Cotton Company Limited (2006/7) | Establishment and maintenance of 700 cotton demonstration sites for increased production and improved technology transfer in the Mid-Western region. The districts impacted include Masindi, Hoima and Kiboga. | 4-May-06 | 28-Feb-07 | 46,760,000 | | $42,003 | completed | |
| 55 | Novo Enterprises Ltd (2006/7) | Establishment and maintenance of 700 cotton demonstration sites for increased production and improved technology transfer in the Eastern region. The districts impacted include Tororo and Busia. | 4-May-06 | 28-Feb-07 | 46,760,000 | | $41,887 | completed | |
| 56 | Nyakatonzi Co-operative Union Ltd (2006/7) | Establishment and maintenance of 700 cotton demonstration sites for increased production and improved technology transfer in the Eastern region. The districts impacted include Kasese, Bushenyi, Kamwenge and Kanungu District | 3-Jul-06 | 30-Apr-06 | 46,200,000 | | $41,171 | completed | |
| 57 | Kyagalanyi Coffee Ltd | Replanting of robusta coffee and the certification of smallholder coffee growers in Nakanyonyi-Mukono District | 12-Jul-06 | 28-Feb-08 | 142,910,000 | | $264,043 | 51,664,321 | |
| 58 | Ugacof Ltd. | Improvement of yield and quality of coffee beans through the use of mobile washing, depulping and demucileaging units | 12-Jul-06 | 31-May-08 | 142,491,139 | | $104,566 | 61,365,293 | |

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|---|---|---|---|---|---|---|---|---|---|
| 59 | KACOFA | Increasing small householder coffee yield and quality in Kapchorwa and Bukwa Districts | 1-Jul-06 | 30-Apr-08 | 20,020,000 | | $76,264 | 11,186,371 | |
| 60 | SOMED | Rice initiative development scheme in Masindi, Gulu and Kibaale districts targeting 1,300 small holder farmers through establishment of 140 demonstration plots | 12-Feb-07 | 31-Mar-08 | 34,330,000 | | $173,639 | 6,673,000 | |
| 61 | Upland Rice Millers Ltd. | Establish a viable rice out growers scheme in Kumi and Bukedea with establishment of 70 demonstration plots targeting 1,200 small holder farmers | 12-Feb-07 | 31-Mar-08 | 26,625,000 | | $96,717 | 3,313,000 | |
| 62 | Ecomax | Upland rice out growers' scheme project support and extension services program targeting 1,000 small holder farmers for improved technologies through establishment of 80 demonstration plots in Luwero and Semuto | 12-Feb-07 | 31-Mar-08 | 28,360,000 | | $121,717 | 3,853,000 | |
| 63 | Sunrise Commodities and Millers Ltd. 2007/8 | Upland rice promotion in Refugee re-settlement camp Chaka - Rice Market linkage by Sunrise/Chaka IDP farmers in Kyenjojo district through demonstration of 80 demonstration plots targeting 2,500 small holder farmers exposed to improved technologies | 12-Feb-07 | 31-Mar-08 | 23,250,000 | | $178,417 | 5,456,000 | |
| 64 | A.K.Oils & Fats (U) Ltd (2006/7) | Sunflower Production in Oyam, Apac, Lira and Masindi districts through establishment of 1200 demonstration plots targeting 30,000 small holder farmers exposed to improved technologies | 1-Mar-07 | 31-Mar-08 | 44,775,000 | | $60,178 | 43,484,900 | |
| 65 | Olam Uganda Limited (Sesame) | Promotion of Sesame Production in West Nile Region through the establishment of 500 demonstration plots targeting 5,000 small holder farmers in the districts of Nebbi, Arua and Yumbe exposed to improved technologies | 5-Feb-07 | 31-Mar-08 | 44,867,500 | | $5,000 | 6,550,600 | |
| 66 | Sanyu Agro Industries Ltd. | Sunflower Production in West Nile Region through the establishment of 300 demonstrations targeting 3,000 small holder farmers exposed to improved technologies | 22-Feb-07 | 31-Mar-08 | 33,090,000 | | $4,833 | 20,988,737 | |
| 67 | Ankole Coffee Processors Ltd | Coffee production training program and coffee replanting in Ibanda district | 1-May-07 | 30-Apr-08 | 80,085,000 | | $60,354 | 53,438,000 | |
| 68 | Coffee Research Institute (CORI) | Evaluation and Selection of Coffee Wilt Resistant Varieties | 1-May-07 | 30-Apr-08 | 79,269,300 | | $41,143 | 73,601,960 | |

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|---|---|---|---|---|---|---|---|---|---|
| 69 | Uganda Breweries Ltd. (2007/8) | Barley Production in Bukwo and Kapchorwa Districts | 1-Apr-07 | 30-Apr-08 | 36,925,000 | | $19,550 | 2,789,830 | |
| 70 | Western Cotton Company Limited (2007/8 | Establishment of 250 cotton demonstration plots for conventional cotton technology transfer in Masindi District | 11-Jun-07 | 30-Apr-08 | 21,075,000 | | $29,652 | 12,143,000 | |
| 71 | Mutuma Commercial Agencies Ltd. | Establishment of 100 cotton demonstration plots for conventional cotton technology transfer in Iganga District | 4-Jun-07 | 30-Apr-08 | 8,430,000 | | $11,861 | 2,956,700 | |
| 72 | Novo Enterprises Ltd. (2007/8) | Establishment of 140 cotton demonstration plots for conventional cotton technology transfer in Butaleja District | 11-Jun-07 | 30-Apr-08 | 11,802,000 | | $16,670 | 4,303,000 | |
| 73 | Nyakatonzi | Establishment of 500 cotton demonstration plots for conventional cotton technology transfer in Kasese District | 2-Jul-07 | 30-Apr-08 | 42,150,000 | | $59,304 | 23,669,000 | |
| 74 | South Base Agro Industries | Establishment of 100 cotton demonstration plots for conventional cotton technology transfer in Tororo District | 11-Jun-07 | 30-Apr-08 | 8,710,000 | | $11,861 | 8,710,000 | |
| 75 | Pramukh Agro Industries | Establishment of 100 cotton demonstration plots for conventional cotton technology transfer in Iganga District | 11-Jun-07 | 30-Apr-08 | 8,710,000 | | $11,861 | 6,976,700 | |
| 76 | Balawoli Cotton Ginnery Ltd. | Establishment of 100 cotton demonstration plots for conventional cotton technology transfer in Kamuli District | 4-Jun-07 | 30-Apr-08 | 8,710,000 | | $11,861 | 4,697,700 | |
| 77 | Bestlines Ltd. | Establishment of 100 cotton demonstration plots for conventional cotton technology transfer in Tororo District | 23-Jun-07 | 30-Apr-08 | 8,710,000 | | $12,596 | 7,910,000 | |
| 78 | Xclusive Cuttings (U) Ltd | Coffee cuttings and Tissue Culture grow-out | 10-Jul-07 | 31-May-08 | 54,360,000 | | $11,031 | 54,360,000 | |

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|---|---|---|---|---|---|---|---|---|---|
| 79 | Rafiki Cotton Industry Ltd | Establishment of 100 cotton demonstration plots for conventional cotton technology transfer in Lira District | 23-Jul-07 | 30-Apr-08 | 9,130,000 | | $14,127 | 6,130,000 | |
| 80 | Northern Uganda Organic Processors & Producers Association (NUOPPA) | Organic Cotton Technology transfer 2007-8 season in | 10-Aug-07 | 31-May-08 | 132,018,250 | | $158,113 | 126,368,950 | |
| 81 | North Bukedi Cotton Company (2007/8) | Establishment of 190 Organic Cotton demonstration plots for organic technology transfer 2007-8 season | 1-Jul-07 | 30-Apr-08 | 11,780,000 | | $25,607 | 11,780,000 | |
| 82 | Olam Uganda Ltd. (Cotton 2007/8) | Establishment of 100 cotton demonstration plots for conventional cotton technology transfer in Hoima and Kibuku | 1-Jul-07 | 31-Mar-08 | 17,420,000 | | $23,721 | 17,420,000 | |
| 83 | Penagos Hnos & Cia Ltda | Ecologic Wet Coffee Processing machines (6) | 1-Sep-07 | 31-Dec-07 | | $38,100 | | | $19,050 |
| | | | | | **5,294,032,000** | **$878,805** | **$13,372,439** | **1,279,866,546** | **$53,860** |

**AMOUNT AWARDED IN USD**

| | |
|---|---|
| USH awards | $2,941,129 |
| USD awards | $878,805 |
| Total awards | $3,819,934 |

**NET AWARDS IN USD**

$3,677,661

**DEOBLIGATED SAF FUNDS**

**PRIVATE SECTOR FUNDS LEVERAGED**

| | Private sector funds leveraged | APEP funds leveraged through SAF |
|---|---|---|
| UCIL | $412,665 | $99,960 |
| A.K. Oils & Fats (2004/5) | $141,213 | $82,528 |
| Copcot (2004/5) | $71,920 | $62,854 |
| Dunavant (2004/5) | $137,215 | $91,826 |
| Bon Holdings (2004/5) | $60,912 | $50,405 |
| North Bukedi (2004/5) | $112,853 | $79,583 |
| Cottco (2004/5) | $43,405 | $34,819 |
| Nyakatonzi (2004/5) | $82,470 | $58,157 |

| | |
|---|---|
| | $ 142,272 |

**AMOUNT REMAINING**

| | |
|---|---|
| SAF remaining | $57,535 |
| % awarded | 98.46% |
| % remaining | 1.54% |

| | | |
|---|---|---|
| Novo (2004/5) | $26,043 | $18,365 |
| CN Cotton (2004/5) | $38,196 | $26,936 |
| Xclusive Cuttings | $90,950 | $86,767 |
| UFEA | $75,240 | $188,635 |
| Ibero | $68,000 | $45,840 |
| VANEX | $81,122 | $224,409 |
| Sai Farms | $2,000 | $2,075 |
| UBL | $65,709 | $6,446 |
| Sunrise | $575,210 | $25,121 |
| Savannah | $415,009 | $18,080 |
| Rwenzori | $6,012 | $7,189 |
| Ankole Coffee | $42,529 | $49,460 |
| A.K.Oils & Fats (2005/6) | $84,482 | $49,447 |
| COPCOT (2005/6) | $68,020 | $40,204 |
| Dunavant (2005/6) | $110,989 | $63,437 |
| Bon Holdings (2005/6) | $59,483 | $29,299 |
| North Bukedi (2005/6) | $96,794 | $46,466 |
| Cottco (2005/6) | $49,057 | $31,899 |
| Nyakatonzi (2005/6) | $67,011 | $36,674 |
| Novo (2005/6) | $36,531 | $25,519 |
| CN Cotton (2005/6) | $50,291 | $29,571 |
| Kawacom (U) Ltd. | $344,476 | $99,028 |
| Pearl Flowers Ltd. | $6,285,585 | $99,000 |
| Ibero (U) Ltd (2006/8) | $142,820 | $99,922 |
| Main Traders Ltd (MTL) | $682,155 | $99,884 |
| Olam Uganda Limited | $99,723 | $99,502 |
| NKG Coffee Alliance Trust | $101,067 | $99,549 |
| Dunavant (2006/7) | $12,001 | $41,881 |
| Bon Holdings (2006/7 | $47,871 | $29,607 |
| North Bukedi (2006/7) | $59,838 | $37,008 |
| Western Uganda (2006/7) | $42,003 | $25,978 |
| Nyakatonzi (2006/7) | $41,171 | $24,973 |
| Novo (2006/7) | $41,887 | $25,906 |
| Uganda Breweries Ltd. | $14,253 | $23,235 |
| Kyagalanyi Coffee Ltd | $264,043 | $78,522 |
| UGACOF Ltd | $104,566 | $78,292 |
| KACOFA | $76,264 | $11,000 |
| SOMED | $173,639 | $19,072 |
| Upland Rice Millers Ltd. | $96,717 | $14,792 |
| Ecomax | $121,717 | $15,756 |
| Sunrise 2007/8 | $178,417 | $12,917 |

Chemonics International Inc.

| | | |
|---|---|---|
| A.K.Oils & Fats (2006/7) | $60,178 | $24,875 |
| Olam (Sesame) (2006/7) | $5,000 | $24,926 |
| Sanyu Agro Industries Ltd. | $4,833 | $18,383 |
| Ankole Coffee | $60,354 | $44,492 |
| Coffee Research Institute | $41,143 | $44,039 |
| UBL (2007/8) | $19,550 | $20,514 |
| Western Uganda (2007/8 | $29,652 | $11,708 |
| Mutuma Commercial | $11,861 | $4,683 |
| Novo (2007/8) | $16,670 | $6,557 |
| Nyakatonzi (2007/8) | $59,304 | $23,417 |
| SouthBase Agro Ind. | $11,861 | $4,839 |
| Pramukh Agro Industries | $11,861 | $4,839 |
| Balawoli Cotton Ginnery | $11,861 | $4,839 |
| Bestlines Ltd. | $12,596 | $4,839 |
| Xclusive Cuttings (U) Ltd | $11,031 | $30,200 |
| Rafiki Cotton Industry Ltd | $14,127 | $5,072 |
| NUOPPA | $158,113 | $73,343 |
| North Bukedi (2007/8) | $25,607 | $6,544 |
| Olam (Cotton) | $10,099 | $23,721 |
| | **$12,677,242** | **$3,029,624** |