Matooke Markets Development Project; Districts Of Operation

Sub-Counties of Operation as at 30th June 2008

Isingiro District: Masha & Kabingo

Mbarara District: Rwanyamahembe, Rubaya & Nyakayojo

Ntungamo District: Rukoni

POVERTY ALLEVIATION DEPARTMENT(PAD)
STATE HOUSE.

Presidential Initiative for Banana Industrial Development (PIBID)

THE MATOOKE MARKETS DEVELOPMENT PROJECT (MMDP)
(A Public Private Peoples Partnership)

September 2008

TechnoServe

Poverty Alleviation Department - State House
Development House Ground Floor, Room 11-18 P.O. Box 25497, Kampala Tel: 0414 346921
Foreword
Mrs. Joan Kakwenzire, Senior Presidential Advisor

The high demand for matooke throughout the year is an indication that banana is a very important crop in Uganda. However, the banana industry still faces many challenges which include, low productivity, relatively low production as a result of overdependence on rain-fed production, slow adaptation of productivity enhancement technologies, lack of diversification among small-scale producers plus severe price fluctuation and long market chain resulting in increased transaction costs. So PAD developed the Presidential Initiative for Banana Industrial Development (PIBID) to address these challenges. PIBID strives to boost the banana industry through supporting key players in the industry. This support includes training in banana agronomy, soil conservation and management, Pest and disease management, post-harvest handling, entrepreneurship development, business planning and new markets development.

In addition to matooke productivity enhancement programs and markets development, PAD has promoted Matooke value addition technologies that have been funded by government, these are, Matooke flour by Dr. Florence Muranga and Fresh banana vacuum sealing by Mr. Bazirake, The Matooke juice preservation technology by Dr. Kyamuhangire and other banana based products (e.g. crafts) are yet to be funded.

Finally, I thank H.E. President Yoweri K. Museveni the Patron of PIBID for being the engine behind banana industrialization. I am also grateful to Professor Akin Adesina, of Rockfeller Foundation, Steve Harris and Erastus Kibugu of TechnoServe Inc. whose profound interest, drive and support resulted in the birth of the Matooke Markets Development Project.

PIBID is an initiative promoted by H.E. the President to accelerate development of the banana industry through research, increased productivity, value addition and improved marketing and markets.

Mr. Bazirake (1st left) explaining his fresh banana preserving technology to President Museveni (2nd right).

ABOUT POVERTY ALLEVIATION DEPARTMENT (PAD)

THE VISION
The Vision of the Poverty Alleviation Department is Prosperity for all Ugandans.

THE MISSION
The Mission is ‘To transform poor communities into self sustaining entities through best practices of agriculture, market-led production, value addition and to support science and technology innovators’.

THE OBJECTIVES
The strategic objectives of the department are:
- To implement Presidential Directives and Initiatives.
- To increase household incomes through integrated agri-enterprises
- To promote agricultural production zones, export villages and value addition.
- To facilitate the formation of producer farmer groups and link them to markets and affordable credit.
- To foster development partnerships and also support science and technology innovators that complement rural transformation.

FUNCTIONS OF PAD
- Direct linkage between the President and the communities.
- Establishment of Demonstration Farms.
- Linking Researchers/Entrepreneurs to H.E. the President.
- Establishment of agricultural production zones.
- Networking and developing partnerships/Attracting counter funding.

OTHER INITIATIVE DEVELOPED BY PAD ARE;
1) The Presidential Initiative Against Hunger and Poverty
2) The Presidential Initiative for Goat Multiplication and Export
3) Bonna Bagaggawale.
4) The Presidential Initiative for Development of Model Agricultural Production and Export Villages.
5) The Presidential Industrialization Fund
6) The Presidential Innovations Fund
7) The Presidential Initiative For Essential Herbal Drugs and Aromatic Oils Production And Processing
8) Presidential Initiative For Apiary Development
9) Presidential Initiative For Promotion of Fish Farming (Pond Fishing)
10) Presidential Initiative For Scientific Achievements Awards.

Mrs. Joan Kakwenzire
Head PAD
Flour based products

Dr. Florence Muranga has spearheaded the development of banana flour and flour based products. The flour technology has been funded by the government.

Banana Juice

Dr. Kyamuhangire of Makerere University developed the technology to preserve banana juice.

The juice technology is yet to be funded by government.

Fresh Matoke preservation

Mr. Bazirake has developed technology to preserve peeled matoke for at least seven days.

PAD promoted Mr. Bazirake’s research for fresh matoke preservation which has received financial support from government.

Mr. Bazirake is currently scaling up his product on the market.

Banana Biscuits

The Matooke Markets Development Project

The Matooke Markets Development Project (MMDP) is one of the several programmes being implemented under the Presidential Initiative for Banana Industrial Development. MMDP addresses the productivity and marketing challenges faced by the farmers, whole sale buyers and the retailers.

The project is implemented in the districts of Mbarara, Ntungamo and Isingiro. The choice of the area was influenced by the fact the above districts are the biggest banana producers and suppliers in the country.

Implementation Agencies:

The Project is jointly implemented by the Poverty Alleviation Department of State House and Technoserve Inc. which is an international, non-profit making development organisation that helps entrepreneurs in rural areas to build businesses that create income. It promotes business solutions to rural poverty. Techno Serve has a regional office in Nairobi, Kenya.

The MMDP is funded by the Rockefeller Foundation (RF), which contracted Technoserve to implement the marketing component while PAD intervenes at the matooke production level of the project.

BROAD OBJECTIVE:

The broad objective is to reduce banana transaction costs, encourage value addition processes, increase productivity and innovations with a view to improving banana production and marketing efficiency.

Under the project, the key roles of PAD are:

a) To identify farmers and organise them for increased banana and dairy productivity

b) To develop and deliver agricultural productivity modules to beneficiary farmer groups, and undertake training in the best production techniques and technologies for banana and dairy cattle.

c) To establish demo sites in conjunction with the beneficiary farming communities,

d) To promote the growing of fruits and vegetables.

e) To demonstrate improved cooking stoves, utensil racks and improved latrine facilities etc.

f) To replicate the productivity model to other small producers.

g) Demonstration of water harvest for irrigation and domestic use.

Our groups are encouraged to use organic manure and are trained to collect and use the cow dung. Mrs. Diana Mwerere of Nyakayojo Sub-County collects and uses cow dung to fertilize her Bananas.
SPECIFIC OBJECTIVES:
- Work with all stakeholders including the private sector in the banana marketing chain from the farm gate to the consumer.
- Improve post-harvesting practices including harvesting, handling, packaging, transportation and distribution.
- Introduce marketing by weight.
- Encourage value addition.
- Conduct commercial trials on new and appropriate value-addition technologies.
- Assist in the formation of Producer Marketing Groups (PMGs) in the rural areas.
- Provide business skills training for the PMGs.
- Train farmers in best agro practices.
- Ensure increased production and productivity of banana.
- Engage in market segmentation.
- Perform and promote market linkages.

The project seeks to develop a profitable and competitive matooke industry in Uganda by reducing transaction costs in fresh matooke supply chain through working with producers and wholesalers.

AGT is one of the partners working with PAD to improve banana productivity. AGT can produce ten million plantlets a year. Mr. Nsubuga of AGT shows Mrs Kakwenzire a disease free Mpologoma banana plantlet produced using the tissue culture method.

MESSAGE FROM MR. ERASTUS KIBUGU, THE COUNTRY DIRECTOR, TECHNOSERVE – UGANDA

The MMDP seeks to demonstrate that smallholder matooke producers can be transformed from subsistence to commercial producers and can earn incremental incomes by participating in more efficient fresh matooke value chains. The project borrows on lessons learned in developing the banana industry in Kenya where TechnoServe has successfully transformed the industry by reducing the number of market intermediaries in the dessert banana value chain. The key highlight of the model is to minimize market failures in the matooke supply chain, thereby realizing the full potential of an efficient value-chain.

Specific Objectives.

In order to achieve the above purposes, the following specific objectives will be carried out in two categories:

1) FREVASEM production:

This category will aim at:
(a) Peeling, inactivating enzymes, vacuum sealing and packaging the matooke for easy handling, transportation and storage.
(b) Adding value to the matooke by prolonging FREVASEM shelf-life and easing marketing locally and internationally.

Fresh matooke preservation

Matooke being a staple food for a big population in Uganda, the crop is harvested and transported in bulk to urban centers. It has been established that for every 100kg transported, 40kg are in form of peelings and stalks (waste). It is therefore uneconomical and a big burden for farmers and traders to transport unpeeled matooke on the poor road networks, at high fuel prices using reconditioned trucks. Therefore, it is deemed cost effective to reduce the bulk of the matooke by 40% and deliver to the user end (urban centers) only the required 60% to consumers. Currently, the 40% of waste transported to urban centers is a nuisance, poses a big problem of garbage accumulation (510 ton per day in Kampala only) and costs the urban authorities a lot of time and money (over 13,000/= per waste ton) for disposal. Moreover, the very plantations that produce the matooke are deprived and depleted of this resource of green manure in form of banana peels and stalks. This project therefore focuses on establishing ways to industrialize post-harvested matooke in a fresh form. In parallel developments the abundant matooke fruit and its waste can be further more utilized as livestock feeds, raw material for many industrial processes including multinutrient mineral blocks, bio gas, charcoal making and culturing of important starter cultures for industrial use.

OBJECTIVE

The broad objective is to establish ways of industrializing, in a fresh form, the post-harvested banana fruit and its by products.
AGT is a limited liabilities company found in Buloba, in Wakiso District. AGT is the first and currently only private company in Uganda to use biotechnology through tissue culture techniques for micro-propagation of different crops on a commercial basis. The Company directs are Swedish and Ugandan seasoned professionals, with many years of experience in the field of agricultural research and entrepreneurship.

**The Goal**

The goal of AGT is to foster a sustainable social-economical and agricultural development so as to meet the future needs of the Ugandan farmers by increasing crop production, through efficient utilization of biotechnology tissue culture techniques.

**The objectives are:**

a) To provide good quality, disease-free planting materials of different crops, in sufficient quantities to farmers through using modern internationally tested and accepted tissue culture protocols and up to date equipment.

b) To offer high quality agronomic advisory/consultancy services to customers by employing a dynamic qualified, dedicated and experienced technical staff.

**Products & Services**

- AGT produces tissue cultured plantlets of different crops. Today AGT is the largest single producer of banana planting material in Uganda. AGT offers advisory/consultancy services on pre-planting and general farm management of crops.
- Establishment of soil and plant analysis laboratory.
- Production of organic fertilizer (Rhizobium and Mycorrhizas)

**This will be achieved through:**

- Increase the numbers and locations of Producer Marketing Groups (PMG’s) in the project areas and other banana producing areas.
- Capture other opportunities, especially the other staples and the dairy component.
- Diversify buyer linkages and put emphasis on institutional markets.

**Message from the Project co-ordinator, Mr. Fred Mutebi**

While bananas used to be grown exclusively for subsistence, today bananas are as much a cash crop as coffee, tea or any traditional cash crop.

Indeed there are many households in Central, Eastern and Western Uganda that earn their living on bananas alone. Hence banana production and marketing can be used for improved food security as well as increasing household incomes for the rural poor.

However, the banana farmer (who is the major focus of PAD) still faces many challenges, the major ones are:

- Undependable rain patterns
- Rampant pests and diseases,
- Maintaining soil fertility
- Increasing productivity
- Under developed markets and marketing system
- Poor infrastructure
- High perishability etc

Our 232 groups collect matooke at a collection centre where the buyer finds it. This saves time on part of the buyer and the farmers.

The Matooke markets Development Project is designed to address some of the above challenges. The project aims at helping farmers not only to sustain current production levels, but also increase productivity without damaging the natural resource base and improving marketing efficiency.

Mr. Yasin Gumisiriza, a farmer of Rwiziringiro cell in area of operation but not in our groups has to ferry the bananas from his farm (6kms) to Mbarara town. He indicated that he misses work on Wednesday and Friday when he goes to town to sell the bananas.
Many banana farmers market their product individually resulting in low price offers, selling bananas at irregular intervals and farmers not knowing how much they get from their orchards.

PAD's contribution to the MMDP project is to ensure increased production and productivity. So as a direct response to the challenge of low productivity, the project procured and distributed in-calf heifers to enable the farmers get milk supplies, while at the same time harvesting the solid and liquid manure from the animals. (Goats are being procured and distributed as we write this report.)

The project also procured and distributed 55 in-calf Friesian heifers (Bos taurus) and the cross breeds thereof, to beneficiaries who had fulfilled the basic animal husbandry criteria like water availability, pasture plot / feedstuff supply source and appropriate animal housing (zero grazing). The project constructed a few cowshed demonstration sites for the farmers to 'copy and apply', with technical backstopping from the project staff. The average milk production is about 8 litres per day of which about 5 litres are sold while the rest is drunk by the farmers to 'copy and apply', with technical backstopping from the project staff.

The project has raised the incomes of small-scale matooke through organization of farmers into Producer Marketing Groups (PMGs), training in basic business skills, especially those that highlight key market drivers, record keeping, minimising costs while at the same time taking up opportunities to make reasonable incomes for themselves, and linking these groups directly with major wholesalers in the Kampala market.

That is not all, by shortening the value chain, producers' incomes are significantly increased and PMGs can then look to engage enterprises that are wholly focused on value-added activities - notably matooke processing.

The project has delivered the following results:

- Imparted basic business skills to over 6,000 smallholder producer farmers in Mbarara, Isingiro and Ntungamo Districts.
- A total of 50 PMGs in the three districts have been trained in banana agronomy, zero grazing management, record keeping and best agro practices.
- Facilitated the linkage of a critical number of wholesale buyers, with capacity to purchase from PMGs at agreed intervals and business terms.
- Facilitated farmers in the project areas to gain access to financial products from the Centenary Bank. These loans have mainly gone into on-farm productivity-enhancement activities.
- Developed an in-calf heifer component to supplement human nutrition through milk consumption, and banana orchard rejuvenation through animal manure.
- During the period April – June 2008, the 232 banana groups (8,234 farmers) sold 11,789 tons at shs 1.028 billion.

In addition, long-term relationships have been formed, and some productivity enhancement measures have been adopted.

- The wholesaler-producer relationship is symbiotic, in that the farmers have started getting more money, as is reflected in the current farm gate prices which is (35-70% higher), than before the project. This is because the farmers do harvesting, grading, negotiate and bargain as a group, before collective selling is done from designated collection centres, in their localities.
- The banana farmers now offer a quality product, convenient collection point, sorted and graded stems, and can also ‘sell a story’ as they bargain with the wholesaler for a good price, payment method and reliability of income.
- The wholesalers now make considerable savings as a result of shortened turn-round, reliable supply source and better grades.
- The fact that all PMG matooke sales are recorded in a Sales Analysis book, It has demonstrated to our partners in a practical way that the individual farmers do earn regular incomes out of which savings can be made and with which bank loans can be repaid.

Finally, I wish to note that it is gratifying that the majority of new bank loans for agricultural purpose in the project areas go to farmers in the producer market groups that we have organized and supported.

Promoting Research

The Poverty Alleviation Department works with diverse partners and Researchers to generate new technologies which are either passed on to the farmers. To this end, PAD works closely with Agro-Genetic Technologies Ltd (AGT) in the area of mass production of planting materials.

Mr. Jude Asiimwe a Field Officer talking to an insemination service provider.

The couple belonging to one of our groups in Mbarara District can now tell how much banana they harvest and the expected monthly income.

PAD identified AGT as one of the development partners because of the following:

- AGT can produce uniform plantlets of any crop in big numbers and in a very short time. This is an important aspect in commercial farming where the markets require consistent quantity and quality crops in a scheduled period of time.