

PROJECT DESCRIPTION

AGT Tissue Culture Expansion Project

Uganda

I. Introduction

This appendix describes the activities to be undertaken and the results to be achieved with the funds obligated under this Agreement. Nothing in this Appendix A shall be construed as amending any of the definitions, conditions, or terms of the Agreement.

II. Background

In recent years, several of Uganda's staple crops, including bananas and coffee, have been affected by diseases that have reduced agricultural yields. Agro-Genetic Technologies Limited (AGT) is a private biotechnology company that produces high quality, disease and pest-resistant crops for use primarily by smallholder farmers' to boost their production, improve household food security and increase their incomes. In August 2007, AGT received grant funding from ADF to improve its financial controls, operational and personnel management systems and reporting, and develop a business and marketing plan. To assist farmers in areas that have seen poor yields due to widespread diseases, AGT plans to expand its capacity to mass-produce tissue plantlets.

III. Funding

A. ADF Contribution

The financial plan for ADF's contribution is set forth in Appendix A-1 of this Agreement. The parties may make changes to the financial plan without formal amendment, if such changes are made in accordance with Article 8 of the Agreement and do not cause ADF's contribution to exceed the obligated amount specified in Article 4, section 4.1 of the Agreement.

B. AGT Contribution

AGT will contribute existing land, buildings, laboratory equipment, motor vehicle and other fixed assets. It will also contribute the time, skills and labor of its existing employees. The company will continue to pay for all administrative, production and other operational costs not covered by ADF.

IV. Project Goal

The goal of this Project is to improve economic and agricultural development in Uganda.

V. Project Purpose

The purpose of this Project is to increase the income potential of smallholder farmers by providing them with pest and disease-resistant planting materials and to increase the revenues of AGT and the incomes of AGT employees. This will be evidenced as follows.

- A. Increased number of farmers with access to higher-yielding AGT bananas for improved household food security from 12,000 to 22,000 farmers by the end of the Project.
- B. Increased AGT adjusted net income (before taxes and depreciation) from UGX 149,763,000 in 2008 to:
 1. UGX 217,162,000 in Year 1;
 2. UGX 351,419,000 in Year 2;
 3. UGX 452,230,000 in Year 3;
 4. UGX 577,031,000 in Year 4; and
 5. UGX 731,190,000 in Year 5.
- C. Increased value of raw materials supplied by farmers to AGT's mother garden from UGX 25,000,000 in 2008 and UGX 25,000,000 in Year 1 to:
 1. UGX 28,000,000 in Year 2;
 2. UGX 33,600,000 in Year 3;
 3. UGX 40,320,000 in Year 4; and
 4. UGX 48,384,000 in Year 5.
- D. Increased bonuses and profit-sharing paid to AGT employees from UGX 5,865,000 in 2008 to:
 1. UGX 21,215,000 in Year 1;
 2. UGX 31,470,000 in Year 2;
 3. UGX 40,567,000 in Year 3;
 4. UGX 51,711,000 in Year 4; and
 5. UGX 65,362,000 in Year 5.
- E. Increase in AGT's payroll from UGX 79,667,000 in 2008 to:
 1. UGX 80,000,000 in Year 1;
 2. UGX 89,600,000 in Year 2;
 3. UGX 97,664,000 in Year 3;
 4. UGX 106,454,000 in Year 4; and
 5. UGX 116,035,000 in Year 5.

VI. Project Outputs

By the end of the Project, the capacity of AGT to mass produce and provide farmers access to high quality, high yielding, pest and disease-free planting materials using tissue culture technology will increase as evidenced by:

- A. Sales revenues increase from a baseline of UGX 448,000,000 in 2008 to:
 1. UGX 660,800,000 in Year 1;

2. UGX 879,568,000 in Year 2;
 3. UGX 1,064,277,000 in Year 3;
 4. UGX 1,287,776,000 in Year 4; and
 5. UGX 1,558,208,000 in Year 5.
- B. Number of total plantlets (bananas, coffee, and pineapples) distributed to farmers will increase from a baseline of 429,000 in 2008 to:
1. 472,000 in Year 1;
 2. 679,200 in Year 2;
 3. 747,120 in Year 3;
 4. 821,832 in Year 4; and
 5. 904,015 in Year 5.
- C. Number of farmers supplying raw materials (mother plants) will increase from 14 in 2008 and 14 in Year 1 to:
1. 18 in Year 2;
 2. 22 in Year 3;
 3. 28 in Year 4; and
 4. 32 in Year 5.
- D. Number of full time workers will increase from 37 in 2008 to:
1. 45 in Year 1;
 2. 53 in Year 2;
 3. 61 in Year 3; and
 4. 66 in Year 4 and Year 5.
- E. AGT's total production capacity will increase from one million banana plantlets or ten million coffee plantlets annually to two million banana or 20 million coffee plantlets annually.

VII. Project Activities

AGT will ensure that the following major activities are implemented.

- A. Improve AGT's capacity to produce tissue culture plantlets by:
1. expanding the size of the growth room in the production facility;
 2. installing racks within the growth room;
 3. purchasing additional laboratory equipment and supplies; and
 4. expanding the existing mother garden.
- B. Improve smallholder farmers' economic circumstances and increase their access to AGT's disease and pest resistant crops by:
1. improving annual yields and revenue for individual farmers using AGT plantlets; emphasizing the propagation of the eight new wilt-resistant coffee varieties along with existing banana and pineapple varieties;
 2. establishing a total of four new nurseries spread between the Eastern, Central and Western Regions of Uganda to provide plantlets to farmers in new areas;
 3. reducing the unit cost of plantlets for farmers close to nursery sites;

4. establishing four new demonstration gardens;
 5. training farmers in best agricultural practices;
 6. procuring a truck to deliver planting materials to nurseries in different parts of the country nearer to farmers; and
 7. increasing AGT's outreach to farmers including:
 - a. developing promotional materials and marketing strategies to popularize AGT's high quality planting materials in the Ugandan market;
 - b. implementing the marketing strategy developed during the EDI period;
 - c. participating in agricultural shows, exhibitions and workshops; and
 - d. facilitating the formation of farmer groups by conducting trainings at each nursery in organizational capacity, governance and marketing.
- C. Improve the management of AGT by:
1. recruiting additional staff as specified in the consultancy report developed during the EDI period;
 2. implementing the policy on dividend and bonus payments to motivate employees; and
 3. collaborating with Makerere University to develop a crop indexing system as part of the on-going research on plant diseases, viruses and nematodes.

VIII. Roles and Responsibilities

ADF's Partner in Uganda will provide the necessary standard ADF training in bookkeeping, monitoring and assessment. AGT is responsible for ensuring the proper management and implementation of the Investment. The ADF Partner in Uganda will provide AGT with technical and management assistance during implementation.

IX. Monitoring and Evaluation

ADF's Partner in Uganda will closely monitor the activities of AGT to ensure proper reporting, adherence to the Project implementation plan by the Grantee and movement towards the achievement of Project objectives. The Partner will continuously assess the Project risk and take remedial actions as needed. Monitoring by the Partner will be an important aspect of the on-going coaching and advisory service. The Partner will review AGT's quarterly reports and will submit comments and observations to the management of AGT as part of the on-going performance assessment.

X. Other Implementation Issues

AGT will implement the consultancy recommendations that were made during the EDI project including those for financial certification.

AGT will develop contracts with existing nursery operators to control prices offered by nursery operators to the benefit of smallholder farmers and to ensure consistency in quality of AGT materials sold by nursery operators on the market.