

## PROJECT DESCRIPTION

### Mpima Dairy Enterprise Expansion Project

#### Zambia

#### 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

Mpima Dairy Producers Cooperative Society (MDPCS) was founded in 2004 by small-scale dairy farmers approximately 20 kilometers from Kwabe town in Zambia's Central Province. MDPCS coordinates the production of raw milk by its individual members, and the sale of milk to vendors in Kabwe District. The Cooperative benefitted from an Enterprise Development Investment (EDI) grant from ADF which improved its operational and management capacity, resulting in the development of a business plan for Mpima's expansion. Today, there is a large demand for raw and pasteurized milk in Central Province and throughout Zambia that remains unmet. However, the Cooperative is constrained from meeting this demand by limitations in its ability to process the raw milk and transport the milk to vendors.

#### III. Funding

##### A. ADF Contribution

The financial plan for ADF's contribution is set forth in Appendix A-1 to 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. Grantee Contribution

MDPCS will contribute its existing assets to the Project, which include office buildings, a milk collection center building, a bulk tank, milk cans and buckets. Members will also contribute their dairy animals, land and land improvements such as paddocks, milk parlors, and feeding and water troughs on their farms.

#### IV. Project Goal

The goal of this Project is to improve the standard of living of small scale dairy farmers in the Kabwe District of Central Province, Zambia.

#### V. Project Purpose

The purpose of the project is to increase the income of MDPCS, salaries of its full-time employees and incomes of its farmer members.

- A. MDPCS's annual net income (before depreciation and taxes) changes from a baseline of Zambian Kwacha (ZMK) -85,842,000 to:
  - 1. ZMK-207,000,000 in Project Year I;
  - 2. ZMK 34,803,000 in Project Year II;
  - 3. ZMK 89,642,000 in Project Year III;
  - 4. ZMK 191,400,000 in Project Year IV; and
  - 5. ZMK 334,836,000 in Project Year V.
  
- B. The total value of annual salaries paid to full-time employees of MDPCS increases from a baseline of ZMK 63,840,000 to:
  - 1. ZMK 113,400,000 in Project Year I;
  - 2. ZMK 130,410,000 in Project Year II;
  - 3. ZMK 149,971,000 in Project Year III;
  - 4. ZMK 172,467,000 in Project Year IV; and
  - 5. ZMK 198,337,000 in Project Year V.
  
- C. The total gross annual income received by member farmers from the sale of their milk to MDPCS changes from a baseline of ZMK 437,182,377 to:
  - 1. ZMK 437,182,377 in Project Year I;
  - 2. ZMK 441,162,000 in Project Year II;
  - 3. ZMK 478,162,000 in Project Year III;
  - 4. ZMK 541,519,000 in Project Year IV; and
  - 5. ZMK 604,876,000 in Project Year V.

#### VI. Outputs

- A. A major output of the Project is the increased capacity of MDPCS to produce and sell milk as evidenced by increased production volumes and increased gross revenues as follows.

1. The annual volume of milk produced changes from a baseline of 241,204 liters to:
  - a. 241,204 liters in Project Year I;
  - b. 284,000 liters in Project Year II;
  - c. 298,000 liters in Project Year III;
  - d. 328,000 liters in Project Year IV; and
  - e. 378,000 liters in Project Year V.
  
2. MDPCS's projected gross revenues changes from a baseline of ZMK 482,408,140 to:
  - a. ZMK 482,408,140 in Project Year 1;
  - b. ZMK 569,241,000 in Project Year 2;
  - c. ZMK 799,055,000 in Project Year 3;
  - d. ZMK 1,010,804,000 in Project Year 4; and
  - e. ZMK 1,336,789,000 in Project Year 5.

## VII. Activities

MDPCS's main business activity is the processing of raw milk provided by its cooperative members and the marketing of processed milk. The following activities will enable MDPCS to increase its production and sales revenue.

### A. Production

The following activities will enable MDPCS to improve its production efficiency, output, and the quality of its products:

1. MDPCS will hire a Production Superintendant to oversee the operations of the milk processing plant and implement quality control procedures. The Production Superintendant will be in place by month three of Project Year One.
2. MDPCS will increase milk production through the purchase and distribution of 30 dairy animals to cooperative members. Using the Heifer International Model, MDPCS will design a herd expansion plan so that each recipient of the 30 cows would be required to give a healthy heifer offspring to another member who had not previously benefited from initial distribution. MDPCS will improve the milk productivity of all dairy animals by implementing an Artificial Insemination (AI) breeding program to increase the number of lactating cows. Dairy animals will be purchased and distributed by month nine of Project Year One. The breeding program will be implemented by the end of Project Year

- One. A herd expansion plan will be in place by the end of Project Year One.
3. MDPCS will hire a Veterinary Officer to monitor the production of milk, oversee animal health, and provide support to the cooperative members in their farms, including implementing a comprehensive Artificial Insemination (AI) program. The Veterinary Officer will be in place by month three of Project Year One.
  4. The Veterinary Officer will train MDPCS farmer members in AI, disease control, and animal husbandry. Training will be completed by the end of Project Year One.
  5. MDPCS will renovate a building to be suitable for use as a dairy processing plant. The plant will be rented and renovated by month six of Project Year Two.
  6. MDPCS will improve the quality and increase the price of its milk by producing pasteurized milk. The Cooperative will purchase and install milk pasteurization equipment and a back-up generator by month nine of Project Year Two. MDPCS will hire local labor to operate the pasteurization equipment by month nine of Project Year Two. By the first month of Project Year Three, the Cooperative will start producing pasteurized milk at its processing plant.
  7. Technical experts provided by the suppliers of the equipment will train MDPCS's employees and other members of the Cooperative on the operation of the new pasteurization equipment in the milk processing facility. Training will be completed by the end of Project Year Two.

## B. Marketing

The following marketing activities will enable MDPCS to expand its market access:

1. MDPCS will hire a Business Manager to create and implement a strategic marketing plan for MDPCS. In addition, MDPCS will hire a short-term marketing consultant to develop a marketing system, and a short-term branding expert will be hired to design branding materials for Mpima milk. The Business Manager will be in place by month three of Project Year One. The marketing consultant and branding expert will be in place by the end of Project Year One.
2. MDPCS will procure one five-ton refrigerated truck for transportation of cold milk to points of sale. The five-ton delivery truck will be purchased and put into service by the end of Project Year One.

3. The Business Manager will design and implement a market survey to assess market demand and price patterns. The market survey will be completed by month six of Project Year Two.
4. MDPCS will develop a promotion strategy for Mpima milk and will market Mpima milk on radio and television stations, and at points of sale. MDPCS will implement the promotion strategy by month six of Project Year Two.
5. MDPCS will secure at least one supply contract with a supermarket or other agent dealing in consumer food products. MDPCS will secure this contract by the end of Project Year Two.

### **VIII. Roles and Responsibilities of the Parties**

The staff and elected leadership of MDPCS are responsible for the management and the proper implementation of the Project. ZATAC, ADF's partner in Zambia, will provide training in the areas of management, ADF reporting, corporate/cooperative governance and business planning. ZATAC will also provide technical assistance to the members and assistance in leadership methods.

### **IX. Monitoring and Evaluation**

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