Business Model

Production and Supply of Livestock Feeding Equipment
Buta Shuta Youth Cooperative, Ethiopia

Muluken Zeleke – Bonga Agricultural Research Center, Ethiopia
Jane Wamatu – ICARDA Ethiopia

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Executive Plan

Feed accounts for 75% of production costs for livestock farmers. A reduction in feed costs or feed productivity would significantly improve the financial situation of sheep farmers. Feed storage and feeding equipment are vital in animal husbandry. The traditional feeding system consists of storing the feed on the ground and feeding the animals from the ground, resulting in loss and contamination of the feed. A lack of equipment is the core problem in animal husbandry in Ethiopia. The aim of Buta Shuta sheep fattening youth cooperative is to diversify from fattening sheep and produce feed troughs, water troughs and feed storage racks designed and developed by Bonga Agricultural Research Center and Mizan Tepi Agricultural Production Center in south-western Ethiopia. By marketing directly to local markets and farms, the cooperative will deliver the products directly to the farmers and reduce the supply chain to the end consumer.

The key factor for the success of the project will be to provide the feeding equipment at a competitive price by minimizing the production costs. Given the products to be delivered and the economic situation in the area to be covered, we estimate that the project will require 141,900 Birr (USD 3000) as seed capital and will generate profit of 80,000 Birr (USD 1700) by the end of the second year.
Mission, Objectives, and Keys to Success

Mission
Creating local business opportunities, growth and impact in the sheep value chain by empowering youth, including women.

Vision
To empower every farmer, especially women, to adopt improved sheep farming practices through the use of appropriate feeding equipment.

Core values
▪ Knowledge sharing
▪ Corporate social responsibility
▪ Teamwork
▪ Passion

Objectives
▪ Supply feeding trough, water trough, and feeding racks.
▪ Achieve annual sale plans.
▪ Creation of jobs with expansion of the operation.
▪ Encourage youths to join the feeding equipment’s delivery business.

Keys to success
▪ Identification of youth groups and cooperatives that can expand sheep fattening.
▪ Linkages to agricultural technology centers.
▪ Provision of quality racks, feed troughs and water troughs.
▪ Develop entrepreneurship and provide the necessary business skill development.
Summary of the Enterprise
The feeding equipment supply business is a legally registered business managed by Buta Shuta Sheep Fattening Youth Cooperative. The main products will be high quality feed troughs and racks designed and developed by Mizan Agricultural Mechanization Center and Bonga Agricultural Research Center using locally available materials. In addition to the feeding equipment, the cooperative will train farmers in the use of the feeding equipment and create incentives to encourage them to use the equipment.

Products
The main products of the cooperative will be feed troughs, feed storage racks, and water troughs.

Ownership
The business will be owned by the youth members as a cooperative business. The scope of the business will depend on the market size and the growth potential. The business is ultimately dependent on profitability of the sheep fattening business.

Cooperative
A cooperative is an autonomous association of people who come together voluntarily and who are contractually obliged to conduct a profitable business together. Each partner is responsible for the management of the company, shares an equal share in the profit or loss, unless the articles of association provide otherwise, and is liable for all debts of the company. This partnership is relatively inexpensive to set up and operate. It is advisable to establish the partnership with a formal written partnership agreement. The advantage of a cooperative is that it is easier to get the start-up capital because all partners contribute to the start-up capital. If 2 or more of the partners are actively involved in the business, there is a benefit of skill diversification. The combined skills, experience and knowledge can provide better service in the business.

Operational Strategy
Buta Shuta youth cooperative will obtain prototypes of feeding, watering and storage equipment designed by Bonga Agricultural Research Center and Mizan Tepi Agricultural Production Center in south-western Ethiopia. The two organizations conduct research and development in agricultural technologies, which are thereafter made available to the public at minimal or no cost. The youth cooperative will adopt these technologies in the form of livestock feeding equipment. The two agricultural centers have a combined total of over 10 prototypes of livestock equipment.
**Marketing Strategy**

The cooperative will create awareness among farmers by use of Government agricultural extension staff, participating in farmer field days, agricultural shows and through the media. Farmers who buy the equipment will also be trained on usage. The marketing strategy will be based on the marketing mix, which consists of the 4 Ps of marketing, namely product (service), price, advertisement, and place (sales).

**Product**

The equipment include feeding troughs, watering troughs and storage racks. These products are in demand because of increasing awareness by farmers to practice improved feeding management as a way to increase output of their livestock.

**Price**

The cooperative will be able to offer the products at a competitive price as it enjoys tax exemptions offered by the Government to cooperatives. These exemptions are not available to normal businesses.

**Promotion**

The cooperative will leverage the *Kebele* administration and agricultural extension services and engage local media to create maximum awareness of the equipment and its importance in increasing the profitability of the sheep and other livestock-based farming business. It will also rely on peer-to-peer marketing and through social media.

**Market**

The sale of feeding equipment will be conducted in local market sheds. The sheds will be adjacent to the livestock market.

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**Market Analysis**

**Demand**

The lack of grazing land requires zero grazing, which requires the purchase of racks to store fodder for the animals and troughs to store fodder and water for the purpose of feeding the animals. Equipment is crucial to curb losses from spoilage and waste. The idea is to offer quality equipment at a price that farmers can afford.

**Market segmentation**

*Community-Based Breeding Program (CBBP) members*

The community-based sheep breeding program has more than 2000 members who are committed to using a full production package, mostly improved feed, to meet nutritional needs
to achieve the full potential of breeding rams. The internal statutes of the cooperative stipulate that all members must use improved feeding equipment to efficiently utilize available feed resources. These farmers are a captive market for the equipment.

Sheep Fattening Youth groups
Youth and women’s groups who engage in market-oriented sheep fattening. The groups target festivals and holidays, so they fatten the rams three times a year. Improved fattening principles, recommend the use of improved feeding equipment.

Farmers in the community
Farmers who are not members of the CBBP get involved in dairy milk production and draft bulls. They also require the equipment to improve the efficiency of their farming operations.

Development organizations
There are NGOs and government development organizations that purchase and distribute the equipment to livestock farmers.

Industry Analysis
Medium-scale producers
Large scale Commercial livestock farms geared towards profit maximization are potential customers because they require the equipment for their operations to run efficiently. Although still few, the number of such farms is on the increase.

Traders
Exporters, large and small traders and slaughterhouses need the equipment to feed livestock for the period between purchase and sale and/or slaughter of the livestock.

SWOT Analysis
Strength
- There are no other local suppliers of the feeding equipment.
- Strong commitment and management of the cooperative.
- Good quality of the equipment.
- The tax exemptions granted to the cooperative ensure supply of cheaper equipment.

Weakness
- Challenge of raising the required start-up capital from cooperative members
- Limited skills in the making of feeding equipment.
Opportunities
- In Ethiopia, the sheep production areas are well known. Most of the farmers are potential customers.
- Shrinkage of grazing land, thus emergence of zero grazing.
- High demand for feeding equipment to save on feed costs, by limiting feed wastage.
- The high margin of sheep fattening, resulting in high uptake of fattening, especially among young people.

Threats
- Emergence of competitors.

PEST Analysis
This business may be influenced by political, economic, social, and technological factors. Below are external factors that can affect the business and the assumptions made in creating this business plan.

Political
Changes in regulations affecting the agricultural sector, especially seed production, would affect the business. New legal provisions could lead to violations of the law or new administrative burdens. Government tax policies would affect the company's business. If the government increases taxes on companies, it would hurt the company's profitability. Changes in labor laws and safety regulations, particularly those relating to agriculture, would affect the way our company does business. We expect political stability in the country to continue and do not expect the government to make any significant changes to regulations.

Economic
Interest rates would affect the cost of capital; the interest rate is directly related to the cost of capital. The rate of inflation determines employee remuneration and has a direct impact on the price of the products. Economic trends serve as an indicator of the sustainability and profitability of the company in our city and help to decide on the marketing strategy. Economic growth in Ethiopia's economy would mean more business for the industry as the economy becomes more active and more people receive higher disposable income.

Social
It is assumed that the population growth in Ethiopia will continue. That means more potential customers and greater demand. It is expected that the current government and non-governmental health campaigns raise people's health awareness and lead to a reduction in the number of illnesses, resulting in a healthier workforce.
Technological

Technological improvements can lead to the production of more efficient feed. A good technical infrastructure would lead to better production, procurement, and distribution logistics, resulting in reduced wastage and lower costs.

Financial Statements

Start-up costs

Wood, bamboo, nails and 100-liter plastic barrels are required for the production of feeding and watering equipment. Vocational training for 25 members of the youth cooperative on construction methods of feeding troughs, storage racks, and watering troughs costs 336 ETB per individual. The youth cooperative will rent a workshop hall at a cost of 208.33 ETB per month.

Start-up costs are shown in the table below.

<table>
<thead>
<tr>
<th>Item Specification</th>
<th>Quantity (number)</th>
<th>Unit price (ETB)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Timber 40cm*60cm</td>
<td>250</td>
<td>1000</td>
<td>50,000</td>
</tr>
<tr>
<td>Bamboo 1m</td>
<td>1000</td>
<td>20</td>
<td>20,000</td>
</tr>
<tr>
<td>Nail in pack</td>
<td>20</td>
<td>800</td>
<td>16,000</td>
</tr>
<tr>
<td>Plastic barrel (100L)</td>
<td>50</td>
<td>700</td>
<td>35,000</td>
</tr>
<tr>
<td>Tools</td>
<td></td>
<td></td>
<td>10,000</td>
</tr>
<tr>
<td><strong>Construction materials</strong></td>
<td></td>
<td></td>
<td><strong>131,000</strong></td>
</tr>
<tr>
<td>Vocational training</td>
<td>25</td>
<td>336</td>
<td>8,400</td>
</tr>
<tr>
<td>Workshop rent</td>
<td>12 months</td>
<td>208.33</td>
<td>2,500</td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td></td>
<td></td>
<td><strong>141,900</strong></td>
</tr>
</tbody>
</table>

1USD=47.87 ETB (December 2021)

Selling Price

From the above construction materials 200 water troughs, 400 feeding trough and 200 feed racks will be produced in one year.

<table>
<thead>
<tr>
<th>Feeding items</th>
<th>Quantity (number)</th>
<th>Unit price</th>
<th>Total price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water trough</td>
<td>100</td>
<td>1000</td>
<td>100,000</td>
</tr>
<tr>
<td>Feeding trough</td>
<td>400</td>
<td>200</td>
<td>80,000</td>
</tr>
<tr>
<td>Feed rack</td>
<td>200</td>
<td>200</td>
<td>40,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td><strong>220,000</strong></td>
</tr>
</tbody>
</table>
Income statement (ETB)
The forecast of the revenue for 5 years was based on an increase of 5% per year related to the increase in production costs and the demand for feeding equipment.

<table>
<thead>
<tr>
<th>Items</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Watering troughs</td>
<td>100,000</td>
<td>105,000</td>
<td>110,250</td>
<td>115,762.5</td>
<td>121,550.625</td>
</tr>
<tr>
<td>Feeding troughs</td>
<td>80,000</td>
<td>84,000</td>
<td>88,200</td>
<td>92,610</td>
<td>97,240.5</td>
</tr>
<tr>
<td>Feed storage racks</td>
<td>40,000</td>
<td>42,000</td>
<td>44,100</td>
<td>46,305</td>
<td>48,620.25</td>
</tr>
<tr>
<td><strong>Total Revenue</strong></td>
<td><strong>220,000</strong></td>
<td><strong>231,000</strong></td>
<td><strong>242,550</strong></td>
<td><strong>254,678</strong></td>
<td><strong>267,411</strong></td>
</tr>
<tr>
<td>Start-up cost</td>
<td>141,900</td>
<td>148,995</td>
<td>156,445</td>
<td>164,267</td>
<td>172,480</td>
</tr>
<tr>
<td>Cost of goods sold</td>
<td>963</td>
<td>1,011</td>
<td>1,061</td>
<td>1,114</td>
<td>1,170</td>
</tr>
</tbody>
</table>

Operating Expenses

<table>
<thead>
<tr>
<th>Items</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Marketing &amp; promotion</td>
<td>480</td>
<td>504</td>
<td>529</td>
<td>556</td>
<td>583</td>
</tr>
<tr>
<td>Repairs and Maintenance of farming materials</td>
<td>500</td>
<td>525</td>
<td>551</td>
<td>579</td>
<td>608</td>
</tr>
<tr>
<td><strong>Total Operating Expenses</strong></td>
<td><strong>980</strong></td>
<td><strong>1,029</strong></td>
<td><strong>1,080</strong></td>
<td><strong>1,134</strong></td>
<td><strong>1,191</strong></td>
</tr>
<tr>
<td><strong>Net Profit</strong></td>
<td><strong>76,158</strong></td>
<td><strong>79,965</strong></td>
<td><strong>83,964</strong></td>
<td><strong>88,162</strong></td>
<td><strong>92,570</strong></td>
</tr>
</tbody>
</table>

1USD=47.87 ETB (December 2021)

Risk Analysis
The following risks could have an impact on the forage seed supply business, financial position or results of operations. Additional risks and uncertainties that are currently unknown or that are currently considered to be immaterial could also have a material adverse effect on the business, financial or earnings position.

Fluctuations in the price of construction materials
The production and pricing of these products are determined by constantly changing market forces of supply and demand over which there is limited or no control. Fluctuations in production costs have a direct impact on gross margin and profitability. Additionally, if prices increase to offset higher costs, lower demand for the products would ensue and sales volumes plummet.

*New or stricter government regulations could impose material costs and affect the business*
Changes in laws or regulations that impose additional regulatory requirements on the business could increase the cost of doing business or restrict activities, thereby, adversely affecting operations.
Potential Sources of Finance

Equity Financing

*Personal Savings:* Not everyone has savings, but when one does, they are at a good place to start. The timeframe for starting a business can range from six months to a year. Starting a business means sacrifice and one has to limit costly lifestyles as much as possible and save money. It is important to have a savings plan. Save a certain percentage e.g. 20% of your salary or income as start-up capital for your company. Open a savings account with a reputable bank. Be disciplined.

Debt Financing

Borrowing involves borrowing from creditors with the requirement to repay the borrowed capital plus interest at a certain future date. For the creditors (who lend funds to the company), the interest on the loan amount to the borrower is the reward for providing the debt financing. Debt financing may be secured or unsecured. Secured debt has collateral (a valuable asset that the lender can attach to satisfy the loan in case of default by the borrower). Conversely, unsecured debt does not have collateral and places the lender in a less secure position relative to repayment in case of default. Debt financing (loans) may be short-term or long-term in their repayment schedules. Generally, short-term debt is used to finance current activities such as operations while long-term debt is used to finance assets such as buildings and equipment.

*Microfinance Banks and other commercial lenders*

Banks and other commercial lenders are popular sources of business financing. Most lenders require a solid business plan, a positive track record, and plenty of collateral. These are usually hard to come by for a start-up business. Once the business is underway and profit and loss statements, cash flows budgets, and net worth statements are provided, the company may be able to borrow additional funds. Borrowing money from micro-financial institutions to start a business is not advisable as their interest rates are high and unsustainable.

*Tips on applying for a loan*

1. Look objectively into the future of the company. What is the funding needed for? Is short-term or long-term financing required? How will the money need to repay the loan be raised?
2. A loan should be sought for with confidence. A business proposition is sold and the lender should make a profit if they loan you the money. The lender must be convinced that he is not taking a great deal of risk. Risk management plans should be provided.
3. Check that the bank is ready to lend money for the securities on offer. A proper application including a business plan should be drawn up.
4. The following information must be collected for an application:
   - How much money is needed?
   - What type of loan is desired?
▪ When will the money be needed?
▪ What will the money be used for?
▪ How will the loan be repaid? Copies of any negotiated contracts should be presented. Include estimated income and all expenses. How long should be loan period be?
▪ What collateral is required in return for the loan? Independent and realistic assessments of the assets on offer should be sought.
▪ Personal information should include age, education, experience, and personal worth, and a statement about personal financial needs. Funds required to cover living expenses at the start of your business should be considered.
▪ Information about the company should be included in the business plan. A brief history of the company, plans, and accounts for the current and past year if it is an existing company, and a cash flow forecast for both existing and new companies.
▪ Include information about existing funds and individual shares. List assets and liabilities, bank balances and other deposits or investments.
▪ What is the previous credit history? What other existing obligations are there? List all loans, hire purchase and leasing contracts.
Business Model Canvas

Problem
- Lack of feeding equipment like feed trough and racks in local market

Solution
- Youths cooperating and supplying fattening equipment to local market

Unique Value Proposition
- Providing feeding equipment in the local market

Unfair Advantage
Cooperatives are tax-free and the production is under the community with minimum transport cost

Existing Alternatives
Due to lack of inputs, there is no provision alternatively

Key Metrics
- Quantity of inputs disseminated
- Number of farmers oriented

High Level Concept
Feeding equipment minimize feed wastage, contamination and enhance profitability

Customer Segments
Different agroecology, youth group, women’s, private sectors

Channels
Direct marketing on local market

Cost Structure
- Labor cost, seed cost, administrative cost

Revenue Streams
- Saving, profit from seed purchase,