

Business Model for Sheep Market Information Service in Bonga, Ethiopia

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Addis Ababa
2023

Contents

Acknowledgment.....	2
Executive Summary.....	3
Introduction.....	5
Products and Services	7
Customer Description.....	8
Target Market	9
Description of Competitors.....	10
Value Proposition	10
Marketing Strategy	11
Revenue Stream and Pricing	13
Revenue stream.....	13
Pricing	13
Resources and Management.....	14
Key Activities	16
Implementation of the Model	16
Key Partners.....	18
Cost Structure	19
Financial Analysis.....	21
Risks and Challenges	24
Management Plan	25
References.....	26

Acknowledgment

This work was conducted as part of the CGIAR Initiative on Sustainable Animal Productivity for Livelihoods, Nutrition, and Gender Inclusion (SAPLING). CGIAR research is supported by contributions to the CGIAR Trust Fund.

Executive Summary

- Small ruminant production plays a crucial role in the agricultural sector of the country, contributing significantly to the economy and food security.
- There are several production and marketing-related challenges that small ruminant keepers in Ethiopia are facing. One of the critical challenges small ruminant keepers struggle with is the lack of market information.
- Without timely and accurate information on market trends, prices, and demand, farmers are unable to make informed decisions about when and where to sell their products, resulting in potential financial losses and missed profit opportunities.
- Scientific studies have shown that access to market information has a positive effect on smallholder farmers' market participation and income.
- It is expected that a well-designed and context-specific market information service will be a profitable business as the farmers and other market actors will be willing to pay for the service.
- This document presents a business model that can serve as a framework for entrepreneurs to establish profitable ventures that address the challenges faced by sheep keepers and other market actors.
- The key benefits for customers of this business will include understanding market trends, identifying potential buyers, and negotiating fair prices for their products.
- The market information service will primarily focus on the provision of timely and accessible information on seven key variables. These are price, quantity demanded, quantity supplied, environmental and social shocks, and availability and access to market services.
- The business will collaborate with relevant stakeholders such as government agencies, agricultural extension services, and market actors to ensure the accuracy and reliability of the information provided.
- Currently, there are no competitors in the market information service business.

- This business will offer services that improve market efficiency, market risk management, and market participation and performance of the different actors.
- This model is developed based on the assumption that a user-friendly mobile application, complemented by SMS and USSD facilities, will be developed to allow customers to easily access and explore market information.
- The key outlet to be used to avail the information to consumers is a mobile application.
- This application will be accessible only for subscribers and the payments will be based on hits for information access purposes. This model offers progressive pricing plans, allowing customers to choose the package that best suits their needs and budget.
- The business model utilizes a combination of technology and on-the-ground support to ensure that the market information is accessible to those with basic models of digital phones.
- The costs used for financial analysis in this business model represent an average scenario for the entrepreneurs, and expenses will vary depending on the entrepreneur and their management decisions.
- The calculated net present value and the internal rate of return show that the sheep market information business in Bonga is financially feasible.

Introduction

Ethiopia is endowed with a large population of small ruminants [sheep and goat]. Small ruminant production plays a crucial role in the agricultural sector of the country, contributing significantly to the economy and food security. Small ruminants provide livelihood opportunities for many rural households, particularly those in remote and disadvantaged areas.

Despite the magnitude and potential of the small ruminant population, the economic benefits both at national and at individual levels are very low compared to similar economies (Kassie *et al.*, 2022). There are several production and marketing related challenges that small ruminant keepers are facing in Ethiopia. One of the critical challenges small ruminant keepers struggle with is the lack of market information (Legese *et al.*, 2014; Kassie *et al.*, 2021).

Farmers often rely on word-of-mouth or personal connections to gather information about market prices and demand. The lack of a reliable market information system exacerbates the challenges faced by small ruminant keepers in the country. Without timely and accurate information on market trends, prices, and demand, farmers are unable to make informed decisions about when and where to sell their products, resulting in potential financial losses and missed opportunities for profit. Having limited access to market information, compounded with lack of other infrastructure, has curtailed the level of value addition along the livestock chain.

So far, there is generally very limited and inaccessible effort to provide market information to the smallholder farmers in Ethiopia. The main structured marketing information system for the livestock sector in Ethiopia is the National Livestock Market Information System (NLMIS), a government initiative launched in 2019. The system works via mobile text messaging from a central server where price and volume information are aggregated by

livestock, breed, age, sex, and grade for 47 markets in different parts of the country. The database is updated regularly.

The NLMIS has reduced duplication of efforts at different levels of government, improved digitizing, analysis, and packaging of livestock market information for dissemination, reduced delay in market data transmission, and set a standard for generating comparable data. However, awareness about the NLMIS itself and the technological difficulties to access its services remain limiting factors to its widespread use and is limited and inefficient (Kassie *et al.*, 2022).

Scientific studies have shown that access to market information has a positive effect on smallholder farmers' market participation and income (Kassie *et al.*, 2021). It is therefore expected that a well-designed and context specific market information service will be a profitable business as the farmers and other market actors will be willing to pay for the service. This document presents a business model for such a service.

This model presents a framework for entrepreneurs to establish profitable business that addresses the challenges faced by sheep keepers and other market actors in accessing timely and accurate market information. The business will help its customers make informed decisions on production, marketing, and pricing strategies. The key benefits for customers of this business will include understanding market trends, identifying potential buyers, and negotiating fair prices for their products. Additionally, the business will provide valuable insights into market demand and supply dynamics, enabling farmers to plan their production accordingly and avoid losses due to oversupply or undersupply.

This model is meant to serve as a template or a guideline for developing and implementing market information provision services. This is the case for two reasons: first, we are focusing only on sheep market information. In fact, in some locations, sheep marketing could be the most important economic activity. However, our focus emanates from the fact that we are intending to develop a framework than a comprehensive business plan. Second, our geographic focus is Bonga. This is because we are assuming that for a private

entrepreneur it will be virtually impossible to have large-scale market information in place due to the initial capital needed to establish the business.

Products and Services

The sheep market information business intends to serve smallholder farmers and other market actors. Another important objective of this model is encouraging private entrepreneurs to establish market information services as there is a growing interest in data and information that can be used to inform decisions at different levels of production and marketing of livestock.

The market information service will primarily focus on the provision of timely and accessible information on seven key variables. These are price, quantity demanded, quantity supplied, environmental and social shocks, and availability and access to market services. The business will develop a user-friendly application, complemented by SMS facilities, that will help farmers and stakeholders access real-time market prices, supply and demand trends, and other relevant information. The real-time updates provided by the system will enable farmers to respond quickly to any changes in the market, such as fluctuations in demand or the emergence of new market opportunities.

The business will collaborate with relevant stakeholders such as government agencies, agricultural extension services, and market actors to ensure the accuracy and reliability of the information provided. This collaboration will help ensure that the data collected is comprehensive and up to date, allowing customers to make informed decisions about their sheep production and or marketing decision.

Customer Description

- i. Smallholder Farmers: sheep keepers will be the most important customers of the service. They are not only large in number but also least informed about what is happening in the sheep markets in general. We expect the sheep keepers to benefit in many ways from the information service.
- ii. Brokers: brokers are among the most important and powerful actors in livestock markets in rural Ethiopia. Brokers in these markets exploit on the information asymmetry among the different actors to make a living. Given their understanding of the importance of information and the market mechanism, they will be a key user of the service. They might not be too many in number and yet the intensity with which they will be using the information will be high.
- iii. Traders: traders also have limited access to information, and they usually depend on brokers to discover prices in the markets. Because the traders are very few in rural markets, they usually benefit in terms of being price setters along with the brokers. Yet, they struggle to make profit in selling to bigger traders in secondary and tertiary markets. Therefore, they will benefit from the service this business is to offer. Like brokers, the number of traders in rural markets will be limited. However, their intensity of use is expected to be higher relative to farmers.
- iv. Abattoirs: abattoirs purchase bulk of sheep at a time for slaughtering both for domestic and for international markets. These abattoirs struggle to operate at their full capacity because of the limited supply of animals of the required quality. Timely and reliable information will help them reduce their transaction costs and purchase more animals as they will be aware of what is happening in the markets. Given the struggles they have in securing enough supply and their need to remain afloat in the business, the abattoirs are expected to be among the intensive users of the market information service.

- v. Live Animal Exporters: the sheep supplied to the international market is generated from smallholder production systems in rural Ethiopia. Like abattoirs, exporters hardly get enough supply of sheep. In addition to the effect on the price that they are willing to pay for the sheep, the fact that not all sheep keepers are aware of the periodic and yet large purchases by the exporters contributes to the low supply of sheep. The service this business is to offer will therefore be very useful for the exporters and hence they will be an important group of customers.
- vi. Individual Consumers: sheep are important part of the sociocultural fabric of Ethiopians. Slaughtering sheep is among the most important elements of religious festivities – regardless of the denominations. More than 10 religious holidays entail sheep slaughtering and these are periods where there is high demand for sheep throughout the country. Individual consumers, like any other actor, have little or no information on the demand, supply, and/or prices of sheep in the markets. They usually figure out what is happening in the market by physically visiting the markets. The information service will therefore save these consumers from unnecessary cost and help them make informed purchasing decisions.

Target Market

For this model, we will focus on Bonga town and its surroundings in geographic terms. Most of the customers will also be from Bonga and neighboring areas. However, brokers, traders, exporters, and abattoir owners are expected to come from different parts of the country.

According to the Central Statistics Agency, Bonga has a population of 107,731 people which is growing at a rate of 2% per year (CSA, 2021). Sheep production is a significant source of income for the rural households in the area. Sheep serve, among others, as a store of value and quick sources of cash because of their liquidity. There are large live sheep markets in and around Bonga where sheep keepers and traders visit.

Description of Competitors

Currently, there are no competitors in the market information service business. However, there are efforts by different actors, for example RE Technology Solutions PLC, to establish agricultural market information systems for commercial purposes.

Value Proposition

At national level, the proportion of live sheep sold at farm gate, primary markets, and secondary markets is 10%, 20%, and 70%, respectively (Gizaw *et al.*, 2010; Tadesse, Negesse and Abebe, 2015; Abate and Addis, 2021). However, due to the lack of access to market information and limited resources, farmers often struggle to maximize their profits from small ruminant production. Our business aims to address this issue by providing real-time market insights and support to sheep market actors in Bonga.

This business will offer services that improve market efficiency, market risk management, and market participation and performance of the different actors.

In terms of market efficiency:

- accurate and timely information on current and projected prices empowers market actors leading to reasonable market dynamics and manageable price volatility,
- understanding market trends helps all market actors adjust their production and consumption plans, and
- accessing readily available market information reduces transaction costs.

In terms of improved market risk management:

- timely alerts on shocks that disrupt the livestock market will allow the market actors to take preventive measures and minimize losses, and
- access to reliable data enables market actors to make informed choices about sheep production and marketing.

In terms of improving market participation and performance:

- sheep keepers will have better access to markets and higher prices for their sheep, leading to increased income and improved livelihoods,
- consumers benefit from reliable access to affordable sheep, and
- increased market efficiency and profitability will help transform rural livelihoods.

Marketing Strategy

The marketing strategy for this sheep market information business revolves around the four Ps: product, price, place, and promotion.

i. Products

The product is the provision of real-time market insights and support to different market actors in Bonga. The business needs to ensure that the information it provides is accurate, up-to-date, and relevant to the specific needs of its customers.

ii. Price

Pricing is a crucial aspect of the marketing strategy of any business. Hence, this business shall aim to strike a balance between affordability for the target market and sustainability for the business. By offering flexible pricing options and value-added services, the business can cater to different budget constraints while maintaining profitability.

iii. Promotion

Promotion plays a vital role in creating awareness and generating demand for the business. Through targeted TV and radio advertising campaigns, partnerships with local agricultural organizations, and word-of-mouth referrals, the business will strive to reach its target audience effectively and establish itself as a trusted source of market insights in the region.

Additionally, the business will provide regular updates through SMS alerts and a dedicated mobile application, ensuring that the customers have access to real-time information regardless of their location.

iv. Distribution

Distribution of the information will be available through multiple platforms such as SMS alerts/Short Code/, bulk SMS, market information platform, mobile applications, Interactive Voice Response (IVR) hotline, and USSD platforms. Sheep come and go to Bonga from residents and marketers within a radius of 10-15 kilometers. The information to be collected and analyzed and marketed will be generated from all the markets those residents of Bonga district visit. The diagram below (Figure 1) shows the markets in a 15 kilometer radius from Bonga town.



Figure 1: Geographic scope of the business

Revenue Stream and Pricing

Revenue stream

Market information service business can generate revenue through various means. One way is by charging fees for accessing the mobile application for the information service or subscribing to the services on the online platform. Businesses can also generate revenue through partnerships and collaborations with other businesses, such as data providers or market research firms and donors. Additionally, market information businesses may offer premium services or customized reports for a higher price. Another way for market information business to generate revenue is by offering data analysis and consulting services to their clients.

Pricing

Pricing for market information services can vary depending on the provider and the level of access to information required. Market information becomes cheaper over time, and one

reason for this is advancements in technology. As technology continues to evolve and becomes more accessible, the cost of providing these services can decrease. Furthermore, as competition among providers increases, there may be downward pressure on prices to attract and retain customers.

This model is developed based on the assumption that a user-friendly mobile application, complemented by SMS and USSD facilities, will be developed to allow customers to easily access and explore market information. As a result, the price will be determined by the number of hits/times users request information. This pricing model can be beneficial for both customers and the business owner. Customers can have the flexibility to pay for only the information they need, while the service provider can generate revenue based on the demand for their services. Moreover, this model encourages entrepreneurs to continuously improve their applications and provide accurate and up-to-date market information to attract more users and increase their revenue. This model offers progressive pricing plans, allowing customers to choose the package that best suits their needs and budget. Additionally, it also offers subscription options, where customers can pay a monthly or annual fee to access the latest market data and insights.

Resources and Management

Human resources

A business that sells market information requires well-trained people who are engaged full time in generating, analyzing, and providing the information to the customers. Data collectors need to be aware of the importance of the quality of the data they generate, and they shall be sufficiently incentivized to keep the data quality consistently up to standard. The digitization of data collection instruments and the automation of the entire data generation and management process needs to be handled by a highly qualified software engineer. Given the patterns in the labor market, the business might consider partnering with individual or a team of software engineers to keep them committed to the business.

The business also requires a business-oriented statistician and marketing expert. Identification of the key variables to focus on and determining the right procedure to process the data and finally to present it in a way that is accessible to the different types of market actors is a daunting task. Such a task can only be handled by statisticians and market experts that need to be part and parcel of the business.

Proprietary mobile application

The key outlet to be used to avail the information to consumers is a mobile application. This application will be accessible only for subscribers and the payments will be based on hits for information access purposes. This proprietary application will be carefully designed and will be updated every six months to ensure that it is easily accessible to all consumers.

Computing facilities

The business needs to put in place a system by which it accesses and uses machine-based and cloud-based databases. The entire data generation and management system needs to be part of the database system. This will create a wealth of data that can be used beyond the weekly market information made available to users on the mobile application.

Appropriate data analysis software will be identified and used to analyze the data. We recommend the freely available software such as R and Python to conduct the analysis. Both software can easily be integrated with common relational and non-relational databases and websites. The software and the statistician need to look into the evolutions in the flexibility and accessibility of the software over time.

Internet services

This business cannot operate without reliable access to internet. The business needs to ensure that it has access to a powerful and reliable internet. In Ethiopia, the internet services are provided by Ethio Telecom and hence the efficiency of the internet service is not necessarily within the control of the business. Yet, a careful plan needs to be put in place.

Key Activities

1. **Market data collection:** This component involves the systematic collection of data on sheep prices, demand trends, supply availability, volume and trades, source and size of supply and demand, market access, and long-term and short-term weather conditions in surrounding communities. This information will be gathered through surveys, in the relevant markets, by a team of trained professionals who work closely with local cooperatives, farmers, agricultural institutions and relevant stakeholders. Data accuracy will be ensured through regular monitoring and evaluation of the data generation process. This includes conducting quality checks on the data collected, verifying its sources, and addressing any inconsistencies or errors that may arise.
2. **Processing and Analysis:** Once the market data are collected, they need to be processed and analyzed to identify patterns and trends. This involves organizing the data, conducting statistical analysis, and generating reports that can be used by the different customers.
3. **Information dissemination:** using mobile applications and a web-based platform information will be made available in a customer-friendly manner. Weekly updates on the variables discussed above will be presented to the customers on demand. The information will be about the markets that sheep buyers and sellers in or around Bonga are interested in.

Implementation of the Model

This business model links the private sector with the public to provide an innovative approach to providing crucial market information to the different actors in the sheep value chain. The business recognizes the importance of reliable and timely market information in enabling the different actors to make informed decisions regarding their production and marketing strategies. Hence, the business is designed to collect information and send the raw data for processing (quality review, analysis, formatting for dissemination and input into system databases) and disseminate the information on a weekly basis to bridge the

information gap that often exists in sheep marketing, empowering the different actors to maximize their profits and improve overall productivity.

The business model utilizes a combination of technology and on-the-ground support to ensure that the market information is accessible to those with basic models of digital phones. Using mobile phones and internet connectivity, the customers can access real-time data on market prices, demand trends, supply chain dynamics, long-term and short-term weather forecasts, and sources of market shocks.

Stages of Implementation

- 1.** Conducting market research is essential to understand the needs and preferences of the target audience. This will help in identifying specific market information that customers require and how it can be effectively delivered to them. Additionally, partnerships with local agricultural organizations and government agencies can be established to ensure the availability and accuracy of market data.
- 2.** Develop a user-friendly platform or application that allows customers to easily access and navigate market information. Investing in technology infrastructure is crucial to ensure efficient data collection and dissemination. This may involve setting up a centralized database or developing a mobile application or online platform that allows farmers to efficiently collect and disseminate this information to both sellers and buyers in the market.
- 3.** Establish partnerships with local farmers, cooperatives, agricultural organizations, government agencies, NGOs, and other private sector entities, to access reliable and up-to-date market data. Collaborating with local agricultural extension services or organizations to ensure that the market information system reaches farmers and other customers in remote or underserved areas.
- 4.** Regularly updating and maintaining the market information system to ensure the accuracy and relevance of the information provided. This could include monitoring market trends, conducting surveys or interviews with customers to gather feedback, and

incorporating new data sources or indicators. By consistently updating and maintaining the system, customers can trust that the information they receive is current and reliable, enabling them to make informed decisions about their agricultural activities.

5. Maintain, get feedback, support, and upgrade: These are some of the key actions that can be taken to ensure the market information system remains effective and relevant. By actively seeking feedback from customers, the system can be continuously improved and upgraded to meet their specific needs. Additionally, providing ongoing training and support to customers on how to effectively use the market information system can further enhance its usability and value to stakeholders and ultimately improve their agricultural practices.

Key Partners

Sheep market information provision business in Bonga is going to be the first of its kind. However, there are institutions that collect data that can be used by the business. The following partnerships are considered important for such a business.

Ethio Telecom

Partnership with Ethio Telecom will be important, as it will be crucial in providing reliable internet access and mobile network coverage in Bonga, enabling the customers to access the system.

Central Statistics Agency (CSA)

CSA collects data from different parts of the country – including Bonga. It does not cover all the markets in the area and yet generates data that will be useful in investigating market integration and price trends. CSA can also collaborate on market research studies and surveys to understand sheep market dynamics and to tailor the business accordingly.

Ministry of Trade and Regional Integration (MoTRI)

MoTRI is the federal agency with the legal mandate to coordinate trade and regional integration at national level. Partnership with MoTRI will be useful as it will provide guidance on existing market regulations and government policies. MoTRI can help in promoting the business among relevant stakeholders like cooperatives, traders, and regional authorities. MoTRI may also help in facilitating integrating the business with existing national or regional trade platforms for wider reach and market access.

Bonga Agricultural Research Center (BARC)

BARC will be an essential partner as it is an institution with in-depth knowledge about the specific dynamics and challenges of the Bonga sheep market - knowledge that can be used to the development of the sheep market information service. BARC can also help in training potential consumers and different stakeholders on using and understanding the services of the business effectively.

Bureau of Agriculture

BoA is the institution mandated to plan and implement agricultural extension services in the country. Given its presence in every kebele and peasant association in the country, BoA will be an important partner for the success of this business. The most important benefit for the business from this partnership will be BoA integrating the services of the business in their initiatives for breed improvement, disease control, and value chain development, providing broader support to sheep farmers.

Cost Structure

The primary costs associated with operating this market information business include:

- i. **Data Collection Costs:*** the market information service business needs to invest in acquiring data from various sources, such as surveys, market research firms or industry databases. These costs can include purchasing data subscriptions and conducting surveys.

- ii. Staffing and Training Costs:** To execute market research effectively, the business needs to hire qualified staff with expertise in data analysis, market trends, and consumer behavior. This requires recruitment costs, salaries, and ongoing training to ensure employees stay up to date with the latest research methodologies and tools.
- iii. Technology and Software Expenses:** This involves developing the application and purchasing or subscribing to market research platforms. These expenses can quickly add up, especially if the business operates in multiple markets or industries that require different research tools. Additionally, the business needs to allocate funds for regular software updates and maintenance to ensure smooth operations and accurate data analysis.
- iv. Operation Costs.** These costs can include things like advertising and marketing expenses, employee salaries and benefits, raw materials or inventory costs, and utility expenses.

Financial Analysis

This section summarizes the assumption and analysis done to evaluate the financial viability of the MIS business.

Methodology of the financial analysis

- The business is about providing sheep market information to different customers.
- Revenue estimates are derived mainly from the dissemination of market information.
- The financial feasibility of the project is done using the current interest rate, i.e., 9.25%.
- *Key assumptions*
 - The cost of other expenses (e.g., labor costs, utilities, etc.) will increase by 29% per year.
 - The cost of living will increase by 37% per year.

Financing Assumptions

- ❖ Interest rate is 9.25%.
- ❖ Income tax is 35%.

Depreciation Rates

- ❖ Housing (Renovating of existing building structure) = 5% per year.
- ❖ Office Furniture and Equipment = 20% per year.

Total Initial Investment Cost

- The costs in this business model represent an average scenario for the entrepreneurs, and expenses will vary depending on the entrepreneur and their management decisions.
- The total initial investment cost of the project including working capital is estimated to be 1.842 million Ethiopian Birr (Table 1).

Table 1. Total initial investment cost

Costs item	Amount
Office rent <small>(1 year)</small>	144,000
Office equipment <small>(5 computers)</small>	200,000
Office furniture	50,000
Salary <small>(15 personnel)</small>	820,000
Utility	148,000
Application development	300,000
Product development	60,000
Marketing Cost	120,000
	TOTAL
	1,842,000

Financial Evaluation

Net present value (NPV) and internal rate of return (IRR) have been calculated to look into the financial feasibility of the Market information service. A positive NPV and an IRR greater than the current interest rate (discount rate) of 9.25 percent show financially feasible investment. As indicated below in table 2, Market information service is a profitable business in Bonga.

Table 2: Financial Analysis Summary for Sheep Fattening Bonga

Bonga											
Year		1	2	3	4	5	6	7	8	9	10
Capital	600,000										
Income											
information sales		2,737,500	3,750,375	5,138,014	7,039,079	9,643,538	13,211,647	18,099,956	24,796,940	33,971,808	46,541,377
Revenue		2,737,500	3,750,375	5,138,014	7,039,079	9,643,538	13,211,647	18,099,956	24,796,940	33,971,808	46,541,377
Expenses											
Other expenses		1,436,400	1,852,956	2,390,313	3,083,504	3,977,720	5,131,259	6,619,324	8,538,928	11,015,218	14,209,631
Total Expenses		1,436,400	1,852,956	2,390,313	3,083,504	3,977,720	5,131,259	6,619,324	8,538,928	11,015,218	14,209,631
Gross Profit	(2,036,400)	1,301,100	1,897,419	2,747,701	3,955,575	5,665,818	8,080,388	11,480,632	16,258,012	22,956,591	32,331,747
Depreciation		12,500	12,500	4,500	4,500	4,500	4,500	4,500	4,500	4,500	4,500
Profit Before Tax		1,288,600	1,884,919	2,743,201	3,951,075	5,661,318	8,075,888	11,476,132	16,253,512	22,952,091	32,327,247
Profit tax (35%)		451,010.00	659,721.65	960,120.18	1,382,876.17	1,981,461.21	2,826,560.78	4,016,646.27	5,688,729.22	8,033,231.77	11,314,536.37
Net Profit	(2,036,400)	837,590	1,225,197	1,783,080	2,568,199	3,679,857	5,249,327	7,459,486	10,564,783	14,918,859	21,012,710
Net Present Value (10%)		28,421,992									
IRR		81.4%									

Risks and Challenges

Poor telephone signal and internet service

Network outages are common in Ethiopia, and this is a problem that seems to persist for a while. The problem with the connectivity is not only that it is poor, but it is also unpredictable. The business will take this into consideration and hence focus on light versions of applications and webpages to ensure that the service is available under limited connectivity.

Inflation

Inflation has remained very high in Ethiopia for almost a decade now. This is certainly going to increase the operation cost of the business and hence the fees for the services to be offered. This creates a problem for the business in terms of managing its current financial flow and projecting its costs and benefits. A dynamic financial management system needs to be put in place to help business cope with the challenges due to the high and continuous inflation in the country.

Instability and political conflict

Ethiopia is going through a difficult period of political conflict which has restricted movement of people and hence geographic scope of economic activities. For now, Bonga and its surroundings are peaceful and hence no immediate threat. However, there is always the risk of ethnic conflicts in any part of the country and if this happens around Bonga, data collection will be difficult. If data could not be collected, the business would not be able to operate. This is a formidable risk that the entrepreneur needs to be aware of.

Government/political interference

Any business to be engaged in provision of information services will be carefully monitored in Ethiopia. Ethio Telecom has a monopoly over telecommunication services, and it is owned by the government. Hence, such a business is expected to face political interference

such as government regulations and policies that may hinder the smooth functioning of the business.

Management Plan

This model will have six professional and semi-professional staff. Although each staff member has a primary responsibility, the key to a successful unit is cross training all members of the unit so that they can fill in for someone who is missing. The unique characteristics of a marketing information system are regular flows of data transmitted through mobile applications, USSD platforms, SMS alerts and the need to monitor the data on schedule and process it promptly. Given the inevitability of staff absences and turnover of staff, it is essential that all system functions can be covered.

1. Statistician: is responsible for all data coming in and being disseminated to users, training staff,
2. Data Input specialists - computerize the statistical data that flows to the MIS system from the market areas. They will input data into the database.
3. Coordinator – responsible for supervising data collection, processing, and dissemination. The coordinator would have three levels of responsibility: Administrative (financial and personnel); technical oversight; and liaison between the unit and the administrative and technical partners and stakeholders in the areas.
4. Administration and Finance - responsible for administration and financial activities, organization, and facilitation in the business.

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