

**BUSINESS PLAN  
FOR A COMMERCIAL TEFF FARM IN ETHIOPIA**

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## **ABSTRACT**

This senior project was undertaken to determine the feasibility of creating a profitable farm in Ethiopia using commercial farming methods in order to raise the standard of living for Ethiopian subsistence farmers and improve food security in Ethiopia. Initially, a farmer's cooperative was the model proposed for this farm. However, further research into the realities of Ethiopian agribusiness and the difficulties smallholder farmers face in obtaining capital, along with in-depth financial analysis called for a modification of the business model. Consequently, this senior project discusses the design and delineation of a business plan for a privately-held, commercial, teff grain farm in Ethiopia that aims to empower smallholder Ethiopian farmers by providing them with a living wage while enabling them to build equity in a profitable farm corporation.

Research, business model design and financial analysis yielded a business plan for a farm, processing mill and distribution framework that is marginally profitable by the end of Year One and sufficiently profitable to be capable of expansion by Year Five.

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## TABLE OF CONTENTS

	<u>Page</u>
SIGNATURE PAGE .....	II
ACKNOWLEDGEMENTS .....	III
ABSTRACT .....	IV
DISCLAIMER STATEMENT .....	V
LIST OF FIGURES .....	VII
LIST OF TABLES .....	VIII
INTRODUCTION .....	1
LITERATURE REVIEW .....	3
Ethiopian Agriculture.....	3
The Ethiopian Land Grab.....	5
Cooperative Farming Method .....	5
Creating A Business Plan.....	7
PROCEDURES AND METHODS.....	9
Design Procedure .....	9
Data Collection and Analysis.....	9
RESULTS .....	10
DISCUSSION .....	11
Business Model Design Change .....	11
Assumptions and Limitations .....	11
Accuracy and Transferability.....	12
RECOMMENDATIONS .....	13
REFERENCES .....	14
APPENDICES	
Appendix A: How Project Meets Requirements for the ASM Major.....	17
Appendix B: Business Plan for Horn of Plenty .....	20
Appendix C: Supporting Data.....	67

## LIST OF FIGURES

	<u>Page</u>
Figure 1. Highlights of business plan .....	26
Figure 2. Startup requirements.....	32
Figure 3. Market analysis (pie) .....	35
Figure 4. Sales by year.....	44
Figure 5. Sales by month .....	45
Figure 6. Horn of plenty organizational chart.....	49
Figure 7. Break-even analysis.....	52
Figure 8. Profit monthly.....	55
Figure 9. Profit yearly .....	55
Figure 10. Gross margin monthly .....	56
Figure 11. Gross margin yearly .....	56
Figure 12. Cash flow diagram.....	58

## LIST OF TABLES

	<u>Page</u>
Table 1. Startup requirements .....	32
Table 2. Market analysis .....	35
Table 3. Yearly sales forecast .....	44
Table 4. Monthly sales forecast .....	46
Table 5. Personnel.....	48
Table 6. Startup funding .....	51
Table 7. Break-even analysis .....	52
Table 8. Profit and loss .....	54
Table 9. Cash flow .....	57
Table 10. Balance sheet .....	59
Table 11. Ratios .....	60
Table 12. Personnel plan.....	62
Table 13. Profit and loss .....	63
Table 14. Cash flow .....	64
Table 15. Balance sheet .....	66
Table 16.Startup requirements.....	68
Table 17. Equipment cost estimate .....	70
Table 18. Cost of production .....	70



## INTRODUCTION

Land-locked in the eastern Horn of Africa, Ethiopia is one of the poorest countries in the world. In spite of its long and fascinating history as a superpower of the ancient world, Ethiopia has fallen on hard times in the past century as war, political corruption, climate change and isolation from the developing world have taken their toll. The starving Ethiopian is a hackneyed stereotype; and yet, this stereotype has some basis in fact.

According to the U.S. State Department (2011), the country has a population of 80 million with GDP per capita in 2009 of \$404 USD and an alarming inflation rate of 36%. Ethiopia's population is still primarily rural, with agriculture employing 85% of the workforce, contributing 45% of the GDP and 80% of the country's exports (Gates Report, 2010). However, the majority of Ethiopian agriculture is subsistence farming that relies heavily on rainfall (an increasing undependable resource as a result of global climate change) and traditional farming practices that have often degraded the soil to the point of uselessness. Ethiopia's dependence on this kind of subsistence-level agriculture is perhaps one of the greatest contributors to economic vulnerability for the country as a whole and (during times of drought) famine among the rural population.

Ironically, Ethiopia is currently undergoing a significant agricultural land-grab as agribusiness firms from India, Saudi Arabia, the United Arab Emirates, Egypt, South Korea and China, are rapidly acquiring Ethiopian land to produce food exports for their countries (Rice, 2010). Some of these ventures claim to benefit Ethiopia and Ethiopians by producing jobs. And yet it appears that the long-term result may be economic colonization that benefits more developed nations while exploiting Ethiopian labor and land.

This senior project created a business plan for Horn of Plenty, a development-oriented commercial teff farm focused on producing crops for Ethiopian consumption versus export. Horn of Plenty proposes to take advantage of the favorable agribusiness conditions in Ethiopia helping former subsistence farmers learn industrial farming methods while enabling them to earn a living wage and acquire equity in a profitable agribusiness company. Developments like this have been successful in Mali (Cotula, 2010). The primary goal of this project was the creation of a business model that could empower former smallholder farmers while creating improved food security in Ethiopia.

The project identified a promising location in Ethiopia as well as which crop was the most useful for Ethiopian consumption and had the best chance of generating a profit in a relatively short amount of time. It outlined the monetary investment needed as well as attainable five and ten year goals and a twenty-five year vision. The proposal intentionally focused on creating a successful Ethiopian business enterprise rather than another NGO that would further dependency on foreign aid. This project significantly benefits Ethiopian farmers and Ethiopians in general by providing a workable alternative to either poverty or dependency on foreign handouts.

**Problem Statement**

The majority of farmers in Ethiopia are mired in poverty because they lack capital, agricultural technology and access to markets. The country as a whole suffers from food insecurity due to inadequate farming methods, climate change, and recent significant competition for farmland by foreign investors.

**Hypothesis**

A business model can be created that would use the current incentives for foreign agribusiness investment in Ethiopia for the betterment of Ethiopian subsistence farmers and the improvement of food security in the Horn of Africa.

**Objective**

Create a business plan for a profitable, commercial teff farm that:

- Raises the standard of living of former subsistence farmers
- Educates farmers to use modern agricultural methods and technology
- Allows them to obtain company equity
- Ensures a reliable food supply for the Horn of Africa.

## LITERATURE REVIEW

### Ethiopian Agriculture

Ethiopia's population continues to be primarily rural with 83% of the population living outside the few urban centers (World Bank, 2011). Agriculturally, the majority of Ethiopians depend upon the produce of smallholder farmers rather than larger agribusiness farms. Consequently, food availability in Ethiopia is extremely dependent upon the factors that influence the productivity of these small farmers: climate change and weather variability, farming methods and irrigation technologies, mountainous terrain, degraded soil, underdeveloped infrastructures (roads, bridges, transportation methods for both water and produce) and inadequate government investment (IFAD, 2005).

In the past fifty years, Ethiopia has been plagued with recurrent droughts and resulting food shortages, becoming a global byword for underdevelopment and extreme poverty. According to Uwe Hoering of Brot Für Die Welt (Bread for the World), "Almost half of the rural population suffers from chronic food insecurity. Year by year, six to eight percent of the 70 million inhabitants are dependent on food aid" (Hoering, 2007). The problems Ethiopia faces today are not because of lack of water or shortage of land. Ethiopia has five main rivers and a great deal of uncultivated land. However, the majority of Ethiopians live in the densely populated highlands and 60% of farmers work less than a hectare of land using rain-fed cultivation methods (Gates Report, 2010). Unfortunately, 80% of Ethiopia's population depends upon this kind of small-scale, rain-dependent agriculture (Hoering, 2007). Climate change has made this dependence increasingly precarious as rainfall can be limited to just a few months or even weeks of the year. In addition, deforestation (created by the common practice of using wood for fuel) has resulted in the erosion of topsoil on the steep hillsides during the rainy season. As a result, ecological and infrastructure disasters are commonplace with roads, bridges and harvests regularly washing away (Hoering, 2007). These harsh ecological realities create the underpinnings of extreme poverty in Ethiopia where between five and fifteen million Ethiopians (up to 15% of the population) must depend upon international food aid annually (IFAD, 2005).

The lack of appropriate government involvement in agriculture has also exacerbated these problems. After the fall of Haile Selassie's regime in 1974, land reforms, reforestation programs and development projects were begun. But the focus of government spending under the Marxist Derg soon turned toward weapons to fight the emerging Eritrean independence movement (Hoering, 2007). With the overthrow of the Derg and the end of the Ethiopian-Eritrean civil war in 1991, some improvements have been made in Ethiopia's economy and investment in agriculture. However, progress is slow. Most small farmers still "do not have access to important inputs and technologies such as fertilizers and improved seeds. Lack of access to credit and market uncertainty compound the problems faced by smallholder farmers. The general lack of inputs hampers smallholders from improving volume, quality standards, marketing and in turn establishing contracts with agribusinesses" (Tiruwah Melese, 2010).

In some areas self-motivated small farmers have been able to farm year-round by using one of the Ethiopia's rivers for irrigation. The Konso tribal group in southern Ethiopia has been able to support itself and provide crops to the local market year-round, with the help of foreign NGO's. Other tribal groups in the northern part of Ethiopia have constructed reservoirs. With the use of diesel pumps they are able to irrigate from these reservoirs year-round (Hoering, 2007). Modern irrigation technologies could benefit Ethiopia with its many rivers and relative availability of arable land. However, problems with salinization, soil erosion and mismanagement have plagued the few Ethiopian irrigation projects that have been attempted in the past. Geo-political problems have also made it difficult to obtain water for irrigation. "Egypt has been particularly successful in torpedoing numerous plans for large-scale irrigation and dam projects on the Nile's head-water by using diplomacy as well as threats, because every drop diverted onto the fields of Ethiopian farmers is feared to be lost to the farmers downstream in the Nile Valley." (Hoering, 2007). For decades Egypt and Sudan have been able to use 80% of the water originating in Ethiopia while Ethiopia uses less than 20% of their own water resource. According to Uwe Hoering, the Ethiopian government has defined a framework for legal and institutional reforms in the water sector, with \$1.7 billion slated for investment in development to benefit agricultural irrigation. There is also some support from the government for rain-fed agriculture aimed at increasing productivity and reducing the danger of crop losses. These efforts depend heavily on support from European nations and NGO's. However, it is acknowledged that rain-fed cultivation alone is not the answer to the need for greater food security (Hoering, 2007).

According to the USDA's Production Estimates and Crop Assessment Division of the Foreign Agricultural Service (2003), crops grown in Ethiopia include "cereals (teff, corn, wheat, barley, sorghum, millet, oats, etc.); pulses (horse beans, chick-peas, haricot beans, field peas, lentils, soybeans, and vetch); oilseeds (linseed, nigerseed, fenugreek, noug, rapeseed, sunflower, castor bean, groundnuts, etc.), stimulants (coffee, tea, chat, tobacco, etc.) fibers(cotton, sisal, flax, etc.) fruits (banana, orange, grape, papaya, lemon, apple, pineapple, mango, avocado, etc.) vegetables (onion, tomato, carrot, cabbage, etc.), root and tuber (potato, *enset*, sweet-potatoes, beets, yams, etc.) and sugarcane." Grains (primarily teff, Ethiopia's staple grain) account for almost 90% of the area planted. Teff is grown primarily in the cool highland areas and sorghum is the main lowland crop because of its drought-resistant qualities (USDA, 2003). For many years coffee has been Ethiopia's major cash crop and main export accounting for over half of Ethiopia's export income (Abraham, 2007). A significant percentage of Ethiopians depend upon coffee production for their livelihood. Oil seeds and cotton have also played a major role as cash crops in the Ethiopian agricultural economy. Oilseeds are currently the second largest export from Ethiopia, with sesame seeds being the most significant export within the oilseed category (Tirurwa Melese, 2010). For the purposes of this project, Dr. Charles Nicholson (personal communication 28 Jan 2011) advised that horticulture production (cereals, pulses, vegetables, and/or roots and tubers) would provide a better return on investment than tree crops (e.g. coffee, oranges, bananas, apples, and cashews).

## **The Ethiopian Land Grab**

In response to chronic food insecurity the Ethiopian government established the Agricultural Transformation Agency (ATA) in December of 2010. The aim of this new agency is to accelerate agricultural sector transformation by addressing “systemic bottlenecks . . . for achieving growth and food security” (ATA, 2011). With the support of the Gates Foundation, the ATA conducted an extensive diagnostic study of Ethiopia’s agricultural system and proposed improvements that would enable agriculture to become *the* driver of economic growth in Ethiopia (Gates Report, 2010). Opening up large tracts of arable land (all land in Ethiopia is government held) for foreign agribusiness investment is one of the strategies for creating this kind of growth.

Since the beginning of this ASM research project in early 2011, there has been an explosion of online information about the rush for farmland in Ethiopia. A Google search for “Ethiopian land grab” currently yields over 275,000 results. According to Human Rights Watch, between 2008 and 2011 the Ethiopian government leased 9.5 million acres of land for foreign and domestic investment (UPI, 2012). “These land grabs have been widely criticized as a new form of neo-colonialism that leaves large parts of Africa in the hands of foreign states and investors while displaced local populations are left to suffer and go hungry”, according to United Press International. In May 2012, Meron Tekleberhan of 2Merkato.com reported that Meles Zenawi, Ethiopia’s president, proclaimed four million acres of arable land open to investors who meet government requirements. Tekleberhan also reports that “the flow of Foreign Direct Investment to Ethiopia (FDI) has shown a notable increase in the last nine months according to the Ethiopian Investment Agency. . . The lead in FDI activities in Ethiopia has been taken by Indian and Chinese companies with companies from Europe, the Middle East and the USA also engaged in investment efforts” (2012). Unfortunately, most of the crops grown on these new commercial farms are not grown for domestic use, but for export to the Gulf States and India (MacDonald, 2010).

## **Cooperative Farming Models**

**In Ethiopia.** Cooperative farming entails a coordinated effort in which farmers pool resources in order to maximize their production and returns. “The purpose of the cooperative (business) is to provide greater benefits to the members such as increasing individual income or enhancing a member’s way of living by providing important needed services. The cooperative, for instance, may be the vehicle to obtaining improved markets or providing sources of supplies or other services otherwise unavailable if members acted alone” (Rapp and Elly, 1996). Currently most Ethiopian farms are cultivated by small holder, subsistence family farmers. Climate change and ecological degradation make this traditional approach precarious at best as each family struggles to survive on its own in an unforgiving environment. One solution to the extreme poverty among subsistence farmers would be the organization of farm cooperatives that bring small farmers together to share resources, risks and returns.

Unfortunately, Ethiopia has a poor track record with cooperative farming as a result of the socialist revolution of the late 1970's. Under the communist Derg regime, farmers were "encouraged" with incentives to form cooperatives so that the country could maximize production and solve the problem of chronic food insecurity. The ultimate goal was a complete collectivization of agricultural production (Ofcansky and Berry, 1991). In spite of pressure from the government to collectivize, traditional small-scale farmers resisted these efforts, seeing the new programs as a threat to their ownership of family farms. These farmers were wise in their assessment since those who fully participated in the collective programs often ended up as land-less workers on state-owned farms (Ofcansky and Berry, 1991). The Derg responded to the farmer's resistance by turning large commercial farms owned by individuals into state farms. These state farms receive a significant share of the Ethiopian government's agricultural investment in terms of seeds, fertilizers, equipment, subsidies and loans even though they account for a small percentage of the nation's agricultural output (Ofcansky and Berry, 1991). As a result of this negative history with collectivization, smallholder farmers need to see another model of cooperative farming that will not result in the loss of control of ancestral lands and livelihood. Fortunately, recent efforts by the Agricultural Cooperative Development International and Volunteers in Overseas Cooperative Assistance (ACDI/VOCA) to promote farming cooperatives have met with some success. "In 1999, ACDI/VOCA began implementing the USAID-funded five-year Agricultural Cooperatives in Ethiopia (ACE) project. This undertaking, which supported the establishment of secondary level unions, expanded farmers' access to purchasing and distribution outlets", particularly coffee and grain farmers (2007).

**General Guidelines.** According to the USDA, a cooperative business or farm is user-owned, user-controlled and user-beneficial (Rapp and Elly, 1996). User-ownership means that cooperative members finance the work of the cooperative through membership fees, withholding agreements or assessments on products sold. User-control puts the decision-making for the cooperative in the hands of all the members, usually through a voting process. Finally a cooperative must be user-beneficial, with the purpose of finding and distributing resources to its members. For example, members might unite to receive the benefit of being able to use equipment that would be too expensive for a single member to own or to have the ability to purchase high-quality seed or fertilizer which can only be obtained in volume (Rapp and Elly, 1996). According to Reitse Koopmans of the Agromisa Foundation of the Netherlands (2004) the failure of cooperative agricultural initiatives in developing countries has often been the result of these basic principles being co-opted for ideological or political purposes "where governments . . . tried to influence and control cooperative development from above and for their own purposes (resulting in) many poorly developed or unsustainable cooperatives." For this reason, Koopmans strongly encourages cooperatives to be privately owned and operated by its members. Koopmans also cautions that although cooperatives are often thought to be a useful means of empowering those in extreme poverty, in fact, the poorest farmers often do not have the ability to finance and organize a cooperative. Rather, they need farmers with more ability to take the lead in developing a cooperative organization that could overcome the challenges in their particular situation. "Once the cooperative has passed its pioneering phase the smallholders and poorest farmers can join and reap the benefits

from this affiliation” (Koopmans, 2004). Koopmans’ cites this checklist of foundational principles for cooperative ventures from the ICA Congress of the International Cooperative Alliance in Manchester, held in 1995. Farming cooperatives should:

- Form through an open and voluntary basis
- Govern itself through the democratic process of its members
- Be financed by equitable member contribution of capital
- Be characterized by autonomy and independence from other structures (including governments)
- Provide education, training and information to its members
- Cooperate with similar organizations
- Develop a larger community concern

Some form of private farming cooperative based on these principles may well be attractive to Ethiopian farmers. According to Dr. Lorenzo Cotula of the International Institute for Environment and Development, there are other models of cooperation and empowerment that can help smallholder farmers. For example, contract farming has been well-tested. “There is also growing experimentation with a wider range of business models. In a biofuels project in Mali, for instance, farmers have an ownership stake in the project” (Cotula, 2010).

### **Creating a Business Plan**

Crafting a detailed business plan is an important part of developing any new business. A business plan provides a blueprint for the definition of a company’s values and goals. In their manual for agricultural business planning entitled *Building a Sustainable Business: A Guide to Developing a Business Plan for Farms and Rural Businesses*, (2010) authors DiGiacomo, King and Nordquist outline five basic planning tasks:

1. Identify values
2. Assess the current situation (including marketing, operations, human resources and financial situation)
3. Develop an organizational mission statement, vision and goals.
4. Outline a business strategy (including strategies for marketing, operations, human resources, finances and alternative plans)
5. Present, implement and monitor your business plan.

In *Hurdle: The Book on Business Planning* (2004), Tim Berry recommends that although a start-up plan is sufficient to decide whether or not to pursue a particular business idea, it is not enough to continue running a business with only a bare-bones plan. To be successful all businesses need to create a thorough plan. There is no one right way to organize a business plan; the choice of organization depends on the focus of one’s work whether that is developing a new product line, creating a plan to gain investor support, starting up a venture from scratch or creating a cooperative business approach. However, most plans will contain the key elements of an executive summary, mission statement, description of current realities, vision and goals, strategic plans (or marketing, operation, human resources and finances), including supporting data and documents (DiGiacomo et al., 2010). While most entrepreneurs primarily feel the need to write a business plan in order to present their business idea to investors, ideally a business plan should be a living document that guides the development of the business. DiGiacomo et al. suggest (2010)

that regular checkpoints should be set to review progress, analyze successes and failures and make course corrections. In this way, the plan becomes more than a one-time strategic exercise----it is a continuously evolving dialogue with the founder's original aspirations and his/her actual environment that serves as a checkpoint for progress and an aid to future decision-making.



## **PROCEDURES AND METHODS**

The idea for this senior project was born during a trip to rural Ethiopia in 2010. While participating in a water project internship with the Millennium Villages Project in northern Ethiopia, it became clear that smallholder farmers needed access to modern equipment to achieve profitability and a higher standard of living.

### **Design Procedure**

1. Research and Literature review  
With the concern for alleviating poverty in rural Ethiopia in mind, researched:
  - The current state of Ethiopian agriculture
  - Laws and regulations affecting foreign investment in Ethiopia
  - Cooperative farming
    - Models in the developed world
    - History of cooperative agriculture in Ethiopia
    - Interviewed founding member of Organic Valley Farmer's Cooperative
  - How to write a business plan for an agricultural venture
2. Using the guidelines found in *Building a Sustainable Business: A Guide to Developing a Business Plan for Farms and Rural Businesses* and Business Plan Pro software (v.12)
  - a. Identified business values
  - b. Developed mission/vision statement
  - c. Outlined short and long-term goals for the corporation
  - d. Analyzed current situation (SWOT analysis)
  - e. Developed implementation strategy for
    - i. Marketing
    - ii. Operations
    - iii. Human resources and organizational structure
    - iv. Financial plan
  - f. Drafted final business plan for use with investors

### **Data Collection and Analysis**

Using Business Plan Pro software guidelines and on-line research collected and estimated approximate measurements, costs and projections for:

- 1) Start up Costs (equipment purchases, shipping, fees for incorporation, etc.)
- 2) Marketing (including market realities, competition, distribution, pricing)
- 3) Operations (equipment and land needs)
- 4) Human Resources
- 5) Organizational and Legal Structure
- 6) Sales and Financial projections

See Appendix C for detailed lists of specific data collected and analyzed.

## **RESULTS**

The final product of this project was a five-year business plan for Horn of Plenty, a commercial teff farm on an initial 300 acre site near Bahir Dar, Ethiopia (see Appendix B: Business Plan for Horn of Plenty). Included in the plan is a grain mill near Bahir Dar and distribution center in Addis Ababa, the capital city of Ethiopia. Horn of Plenty utilizes commercial farming technologies and introduces an innovative approach to packaging and marketing teff flour for Ethiopian consumption. Plan projections estimate marginal profitability in Horn of Plenty's first year of operations, largely due to the low cost of labor and favorable tax incentives for foreign investment in Ethiopia. By Year Five, Horn of Plenty should be able to self-fund an expansion of 50 acres of teff cultivation and an additional distribution center in Addis Ababa.

## **DISCUSSION**

### **Business Model Design Change**

This project was initially proposed as a farmer's cooperative rather than a privately held farm in the hopes of empowering smallholder farmers as farm owners rather than merely farm laborers. However, research into the Ethiopian political and business climate revealed that a) all land is held in lease from the government (thus no one really "owns" their land), b) the current favorable investment conditions are focused on large-scale commercial operations, c) due to the land-lease situation there is no way for individual farmers to contribute sufficient capital to participate in an egalitarian cooperative model (as outlined by the Reitse Koopmans and the USDA). These factors necessitated a re-design of the business model that would take into account both the current opportunities in Ethiopian agriculture and the roadblocks to equity acquisition for smallholder farmers. The new business model addresses these issues by providing immediate economic support for subsistence farmers in the form of a living wage, medical, educational and pension benefits while allowing them to obtain stock in the farming corporation over time.

### **Assumptions and Limitations**

The profitability of the Horn of Plenty business plan relies upon several key assumptions that are currently reasonable (as of August 2012):

- Political stability in Ethiopia and continuing positive Ethiopia-U.S. relations
- Continuing tax breaks for foreign agribusiness investment. This plan relies on obtaining a corporate tax-exemption for at least the first 5 years of operation.
- Low labor costs in Ethiopia
- The ability to attract philanthropic angel "investors" who are willing to make interest-free loans as a form of sponsoring Ethiopian farmers
- Ability to qualify for a low-interest, Overseas Private Investment Corporation (OPIC) development loan

While these assumptions may seem optimistic, in fact they are reflective of current realities. This is an once-in-a-lifetime window of business opportunity in Ethiopia in terms of the Ethiopian government's favorable attitude toward agribusiness investment and the need for such investment. There is also an enormous market for teff in Ethiopia (as well as expanding global demand) and labor costs will remain low. These conditions almost ensure profitability. Obtaining the proposed funding for Horn of Plenty may be the one aspect of the plan that is overly optimistic. Given the global recession, finding interested philanthropists may be difficult and/or another source of startup funding than OPIC may need to be identified. However, review of the plan by competent business advisors may yield new sources for funding.

### **Accuracy and Transferability**

Given the distance from Ethiopia and the relative difficulty of obtaining detailed information about Ethiopian agriculture, this business plan is as accurate as can be expected. Calculations for teff production, seed and labor prices, land needs, irrigation system and farm equipment, legal and tax costs are accurate. Accurate shipping costs were difficult to obtain and are estimated. Financial projections were calculated with Business Plan Pro software which is normed on U.S. businesses. These can be taken as viable estimates for identifying startup funding needs. Horn of Plenty's projected profit before interest and taxes is quite high compared to NAICS ratios for grain farming. This is probably due to the extremely low labor costs in Ethiopia and the plan to utilize philanthropic investment rather than rely solely on commercial loans. These unusual circumstances, coupled with the favorable Ethiopian tax exemption, allow Horn of Plenty to see a very high return on equity from Year Three forward.

Obviously, the litmus test of this business plan would be actual implementation in Ethiopia, which would reveal the true strengths and weaknesses of the plan. It is encouraging to note that a similar business model has been used with some success in Mali (Cotula, 2010). Therefore, the business plan for Horn of Plenty can be viewed as fairly accurate and potentially transferable.

## **RECOMMENDATIONS**

This business plan for Horn of Plenty reflects the best effort at accurate research and forecasting that can be made at distance from Ethiopia. In order for this plan to be truly workable, extensive on-site research in Ethiopia should be conducted. For example, interviews with Ethiopian agricultural experts, agribusiness experts and subsistence farmers about the realities of teff farming in Ethiopia would sharpen the plan and test its feasibility. It would also be important to submit the plan to American business advisors, venture capital consultants and farm advisors for review and revision before seeking to implement the plan. Information about the boom in Ethiopian agricultural development is continuously expanding; therefore, successful implementation would require staying up-to-date on the latest developments through more research and reading.

Additionally, this plan was developed through a learn-by-reading approach, relying on written guides and business software. This increased the difficulty of execution. A course on business planning with face-to-face interaction over questions of design and data analysis would have significantly improved the process of writing the plan.

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**APPENDIX A**  
**HOW PROJECT MEETS REQUIREMENTS**  
**FOR THE ASM MAJOR**

## **HOW PROJECT MEETS REQUIREMENTS FOR THE ASM MAJOR**

### **ASM Project Requirements**

The ASM senior project must include a problem solving experience that incorporates the application of technology and the organizational skills of business and management, and quantitative, analytical problem solving. This project addresses these issues as follows.

**Application of Agricultural Technology.** The project involves the application of agricultural technology through the economic analysis of startup costs for the required agricultural equipment and irrigation system design, as well as the determination of crop selection, lifecycle, soil, water and fertilization needs.

**Application of Business and/or Managerial Skills.** Business and managerial skills are employed in this project through the drafting of an effective business plan including the outlining of vision, values, mission and business strategy. Identifying startup costs, production and labor costs and outlining sales and other financial projections also employ business skills.

**Quantitative, Analytical Problem-Solving.** Quantitative, analytical problem-solving is applied in this project in devising a business model that could help smallholder farmers and maintain profitability. Developing the idea into a viable, concrete financial plan with an accurate analysis of equipment and labor requirements, startup costs, sales forecasts, profit and loss forecasts and cash flow also necessitate quantitative, analytical problem-solving.

### **Capstone Project Experience**

The ASM senior project must incorporate knowledge and skills acquired in earlier coursework (Major, Support and/or GE courses). This project incorporates knowledge/skills from these key courses.

- BRAE 142 Agricultural Power and Machinery Management
- BRAE 203 Engineering Economic Analysis
- BRAE 340 Irrigation and Water Management
- BRAE 418 and 419 Agricultural Systems Management I & II
- BRAE 438 Drip/Micro-irrigation
- BRAE 532 Water, Wells and Pumps
- AGB: 321 Financial Accounting
- AGB: 310 Credit and Finance
- AGB 301 Food Marketing
- AGB 212 Economics
- AGB 401 Managing Cultural Diversity in Agricultural Labor

### **ASM Approach**

Agricultural Systems Management involves the development of solutions to technological, business or management problems associated with agricultural or related industries. A systems approach, interdisciplinary experience, and agricultural training in specialized areas are common features of this type of problem solving. This project addresses these issues as follows.

**Systems Approach.** Throughout the project a systems approach was employed, weaving business and management skills as well as agricultural expertise and perspectives together to solve a specific human problem, namely food insecurity and poverty among rural Ethiopian farmers.

**Interdisciplinary Features.** This project focuses on business and project management in order to define a business model and make business projections; however, it also employs knowledge and analytical techniques that are specific to agriculture. Additionally, developing a viable plan for a foreign business venture necessitates a working understanding of cross-cultural issues. Coursework in cross-cultural communication and the management of diversity also reflect the interdisciplinary nature of this project's preparation.

**Specialized Agricultural Knowledge.** The project applies specialized agricultural knowledge in the selection of crops and the definition of crop lifecycle, water and fertilizer needs. It also uses specifically agriculture-related knowledge to identify equipment needs for farming and irrigation, make accurate harvest projections and develop a marketing and sales strategy for teff flour.

**APPENDIX B**

**BUSINESS PLAN FOR**

**HORN OF PLENTY: A COMMERCIAL TEFF FARM IN ETHIOPIA**

## CONFIDENTIALITY AGREEMENT

The undersigned reader acknowledges that the information provided by Ephrem Teklu Phifer-Houseman in this business plan is confidential; therefore, reader agrees not to disclose it without the express written permission of Mr. Phifer-Houseman.

It is acknowledged by reader that information to be furnished in this business plan is in all respects confidential in nature, other than information which is in the public domain through other means and that any disclosure or use of same by reader, may cause serious harm or damage to Mr. Phifer-Houseman.

Upon request, this document is to be immediately returned to Ephrem Teklu Phifer-Houseman.

Ephrem P-H

Signature

Ephrem Teklu Phifer-Houseman

Name (typed or printed)

July 26, 2012

Date

This is a business plan. It does not imply an offering of securities.

## TABLE OF CONTENTS

	<u>PAGE</u>
EXECUTIVE SUMMARY .....	24
The Problem.....	24
The Solution.....	24
The Market.....	25
The Business Environment .....	25
Investment Required .....	25
Investor Discussion .....	26
MISSION .....	27
Core Purpose .....	27
Our Mission .....	27
Keys to Success.....	27
OBJECTIVES .....	28
25 Year BHAG (Big, Hairy, Audacious Goal) .....	28
25 Year Vivid Description of a Preferable Future .....	28
10-Year Objectives .....	28
5-Year Objectives .....	29
COMPANY SUMMARY .....	30
Company Ownership: Tom-to-Tesfaye Program.....	30
Startup Summary .....	30
PRODUCTS.....	33
MARKET ANALYSIS SUMMARY .....	34
Market Segmentation.....	34
Target Market Segment Strategy .....	35
Industry Analysis .....	37
Competition and Buying Patterns .....	37
WEB PLAN SUMMARY.....	38
Website Marketing Strategy .....	38
Development Requirements.....	38
STRATEGY AND IMPLEMENTATION SUMMARY.....	40
SWOT Analysis .....	40
Competitive Edge.....	42
Marketing strategy .....	42
Sales Strategy.....	43
Sales Forecast.....	43
MANAGEMENT SUMMARY .....	47
Personnel Plan.....	47
FINANCIAL PLAN.....	50
Startup Funding.....	51

Important Assumptions .....	51
Break-even Analysis .....	52
Projected Profit And Loss .....	53
Projected Cash Flow .....	57
Projected Balance Sheet.....	59
Business Ratios .....	60
Long-Term Plan .....	61
SUB-APPENDIX: BUSINESS PLAN TABLES .....	63

## **EXECUTIVE SUMMARY**

Since the 1970's Ethiopia has been a byword for extreme poverty and recurrent famine, in spite of the country's abundant natural resources and impressive history. As a leader among African nations, Ethiopia should be not only food-sufficient but a cornucopia of resources for sub-Saharan Africa. However, lack of access to capital and subsistence farming methods keep Ethiopian farmers in vulnerable poverty and create food insecurity for the country as whole.

Horn of Plenty is a commercial teff-farming venture that aims to elevate the standard of living for subsistence farmers, enabling them to obtain capital while improving food security in Ethiopia. Horn of Plenty re-envision Ethiopia as a land of plenty.

### **The Problem**

- Food insecurity and high prices for staple grains (e.g. teff) in Ethiopia
- 90% of Ethiopian teff farmers use ancient, subsistence methods with extremely poor yield. Few have access to modern farming equipment, irrigation technologies or the capital to obtain these.
- All land in Ethiopia is government-owned. Consequently, small-scale farmers cannot use land equity to obtain loans for farm expansion that would allow them to become self-sufficient.

### **The Solution**

- Horn of Plenty will employ former subsistence farmers at a living wage, educating them to use commercial farming methods and providing them with the equipment and capital to create a profitable commercial farm.
- Through its Tom-to-Tesfaye sponsorship/loan program, Horn of Plenty will link American philanthropic investors with individual farmers to enable them to acquire company equity in exchange for labor.
- Through the use of commercial farming methods and an innovative packaging and marketing strategy, Horn of Plenty will generate a high-quality teff product that is an industry leader in quality, price and convenience.
- Horn of Plenty's profitability will allow it to invest in the general welfare of the community, supporting schools, medical clinics, HIV-Aids organizations.



## **The Market**

- Teff is used by the average Ethiopian on a daily basis. It is the staple grain for creating *injera*, Ethiopia's signature bread. There will always be a market for teff in Ethiopia. Additionally, teff is becoming an attractive new grain for health-conscious consumers in other parts of the world and thus has potential as a profitable export.
- The price of teff has sky-rocketed in the past ten years as an increasing amount of Ethiopian farmland is being used to grow crops for export rather than domestic use. Teff prices will remain steady or rise.
- Traditional ways of processing and obtaining teff are inconvenient and laborious for the consumer. As a result, there is a great deal of room for innovation in the teff market in Ethiopia.
- Almost 4% of the Ethiopian population lives in the capital city of Addis Ababa, within proximity to Horn of Plenty's proposed growing area, making this an ideal region in which to begin marketing Horn of Plenty teff.

## **The Business Environment**

- Labor costs in Ethiopia are quite low. Even with providing generous salaries and benefits to its employees, Horn of Plenty will be able to reach profitability by Year Three and expand our operations by Year Five.
- The Ethiopian government is currently creating a very favorable environment for foreign investment, especially agribusiness investment.
  - No duty is charged on imported equipment and corporate tax exemptions are available for up to eight years.
  - Ethiopian products destined for export are exempted from the payment of any export tax.
  - The Ethiopian government has recently created the Agricultural Transformation Agency, staffed by agricultural experts from around the globe. This agency is focused on resourcing organizations that seek to increase Ethiopian agricultural effectiveness.
  - Foreign investment is protected by law. The Ethiopian government guarantees prompt compensation for the prevailing market value of property if it is expropriated or nationalized.

## **Investment Required**

- \$1.7M in funding estimated for start-up in order to reach profitability within the first year
- \$1.3M loan is secured with agricultural equipment that can be easily liquidated in Ethiopia if necessary
- Owner-operator will invest \$200,000 of deferred salary over five years to fund initial operations
- \$200,000 of interest-free loans needed from philanthropic "angel" investors who are committed to helping subsistence farmers come out of poverty

### **Investor Discussion**

- Projections estimate profitability in Year One, allowing for pay-down of principal on equipment loan by Year Two.
- Projected net profit (after interest and taxes) of approximately \$736,300 over five years
- Projected profits pay for expansion in Year Five and following without added liabilities
- Management Team - Strong and professional with highly specialized consultants.
- Exit Strategy alternatives:
  - IPO after five years
  - Acquisition
  - Private ownership with a long horizon of profits and an ability to expand operations exponentially.

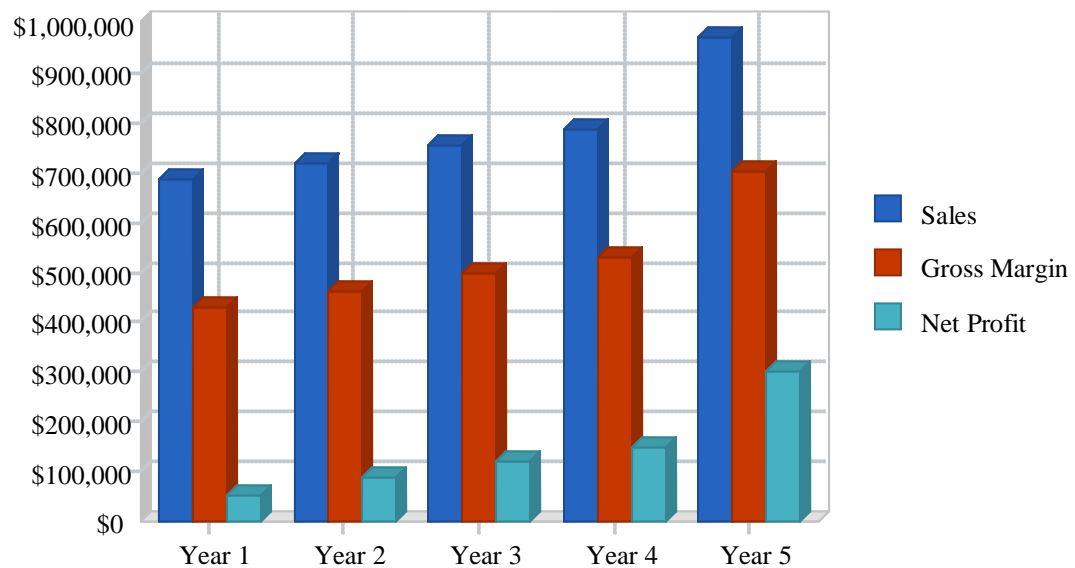


Figure 1. Highlights of Business Plan

## MISSION

### **Core Purpose**

Horn of Plenty exists to transform the Horn of Africa into a land of plenty.

### **Our Mission**

To create an effective, commercial farming corporation that produces high-quality teff grain in order to ensure prosperity for former subsistence farmers and an abundant food supply for the Horn of Africa.

### **Keys to Success**

**Service.** Improving the lives of our smallholder farmers and contributing to the local community's growth and development are our first priorities. We will lead as servants of the community.

**Community.** Working together we will do far more than any one of us could do alone. Horn of Plenty provides a bridge for resources and partnership between American investors and Ethiopian farmers.

**Stewardship.** Our growth must not come at the cost of future generations. We will farm using sustainable, healthy practices---leaving a legacy of health in the land, water, air and animals around us.

**Integrity.** Our business practices will be transparent, honest and fair. We will not participate in under-the-table deals, corruption or excessive debt. "Money is a tool to serve people."

**Trust.** The strength and guidance for our venture comes from our faith in God.

## **OBJECTIVES**

### **25 Year BHAG (Big, Hairy, Audacious Goal)**

Horn of Plenty is *the* company known for re-visioning and re-creating Ethiopia as a land of plenty.

### **25 Year Vivid Description of a Preferable Future**

By 2040, Horn of Plenty:

- Is the industry standard for quality, consistency and availability of teff at a fair price.
- Demonstrates an effective model for agricultural development that provides a living wage for former subsistence farmers while enabling them to build equity in a financially viable commercial agricultural corporation. Horn of Plenty farmers are confident, empowered participants in their own development.
- Is a leader in environmental stewardship. Our company protects the health of Ethiopia's land, air, water, animals and people. Communities touched by Horn of Plenty glow with a sense of promise and abundance.
- Is known for its honesty and integrity in business and its concern for the broader community.
- Significantly elevates the level of education, health and economic prosperity in rural Ethiopia. Horn of Plenty creates and sustains well-resourced K-12 schools and continuing adult education programs that enable farmers and their families to understand and participate in the global economy.

### **10-Year Objectives**

By 2025, Horn of Plenty will:

- Create sufficient profitability to increase its acreage to 2000 acres.
- Develop a learn-by-doing farmer education program that teaches our Farmer Associates commercial farming methods, modern marketing techniques and financial planning strategies.
- Build/refurbish and support a K-12 school near our farm in Bahir Dar, enabling all children from Horn of Plenty families to attend school.
- Institute a scholarship program to help Horn of Plenty students to attend university.
- Expand to three distribution centers in Addis Ababa and new markets in two other Ethiopian cities.
- Pay off interest-free loans to angel investors and/or allow them to reinvest in a new round of farmer sponsorship.

### **5-Year Objectives**

By 2020, Horn of Plenty will:

- Achieve sufficient profitability to increase its acreage to 350 acres.
- Raise the standard of living of its Farmer Associates such that all farming families:
  - Have sufficient income for adequate food, clothing, shelter
  - Are able to send all their children to school
  - Have appropriate medical and dental care
  - Are vested with 5 shares of company stock.
- Expand to two distribution centers in Addis Ababa.

## **COMPANY SUMMARY**

Horn of Plenty is a new agricultural corporation focused on the empowerment of smallholder teff farmers and improved food security in Ethiopia. The company is established as a private, limited Ethiopian corporation in a joint venture with American investment. Ephrem Teklu Phifer-Houseman is the founder, primary owner and chief executive officer of Horn of Plenty. The primary office is located in Addis Ababa, Ethiopia with the initial farm of 300 acres held in a long-term lease near Bahir Dar, Ethiopia.

### **Company Ownership: Tom-to-Tesfaye Program**

In keeping with Horn of Plenty's stated mission to improve the lives of Ethiopian farmers, the company will enable its Farmer Associates to acquire company stock while earning a living wage. We will accomplish this through our Tom-to-Tesfaye Sponsorship program in which American angel investors (i.e. "Toms") sponsor our Ethiopian farmers (i.e. "Tesfayes") through their interest-free startup loans to Horn of Plenty. These loans will enable the company to begin operations and essentially provide working capital that the subsistence farmers could not obtain on their own. The farmers then contribute their labor to Horn of Plenty's mission and over time obtain equity in the company as a benefit of employment.

At inception, 10% of the company will be divided into 150 shares with each Farmer Associate receiving one company share per year over the first five years of operation as part of their yearly benefits package. Shares may not be sold until Year 5 (without board approval), at which time the Farmer Associates may sell one or more of their shares back to the company at the current valuation of those shares. Depending on the success of this stock distribution program, more shares may become available for Farmer Associates after Year 5. Therefore, by Year 5, 10% of the company would be held by Farmer Associates. The remaining 90% would be held by Mr. Phifer-Houseman.

### **Startup Summary**

Horn of Plenty's startup expenses include incorporation and licensing fees in Ethiopia and the set up of a modest, temporary office space in Addis Ababa. The company's combination central office and distribution center will become operational in the third month after planting; consequently these expenses are not included in startup costs.

The majority of startup expenses will be incurred on our farm site and include the first month's land lease payment (to allow for two months of site preparation before planting), well drilling and irrigation system setup, as well as shipping costs for farm equipment and supplies that cannot be bought in-country. These expenses are estimated at \$223,748.

Startup assets comprise the lion's share of Horn of Plenty's startup costs and include \$100,000 in cash on hand, \$1,253,740 in equipment assets (office equipment and supplies for the company's headquarters/distribution center, as well as farm machinery and

irrigation equipment that will be shipped from the U.S. to Ethiopia) for a total of \$1,379,106 in assets at startup. See Appendix C for a detailed list of proposed equipment purchases.

Horn of Plenty will fund the purchase of equipment with a \$1,300,000 loan from the Overseas Private Investment Corporation (OPIC), the U.S. Government's development finance institution. <http://www.opic.gov/what-we-offer/financial-products>. Additional financing will include \$200,000 in short-term loans from individual investors or philanthropists who are interested in partnering with Ethiopian farmers in our Tom-to-Tesfaye program. The final \$200,000 in financing will be provided by the investment of \$50,000/year over five years of deferred salary from the CEO.

Table 1. Startup Requirements

<b>Startup Expenses</b>	
Residence permit	\$600
Licenses and Fees	\$5,666
Consultant fees	\$600
Office space rent	\$1,250
Web Strategy Cost	\$5,630
1st month Land Lease	\$12,141
Well and irrigation establishment	\$151,361
Equipment Shipping: USA to Ethiopia	\$46,500
<b>Total Startup Expenses</b>	<b>\$223,748</b>
<b>Startup Assets</b>	
Cash Required	\$100,000
Startup Inventory	\$0
Other Current Assets	\$25,366
Long-term Assets	\$1,253,740
<b>Total Startup Assets</b>	<b>\$1,379,106</b>
<b>Total Startup Requirements</b>	<b>\$1,602,854</b>

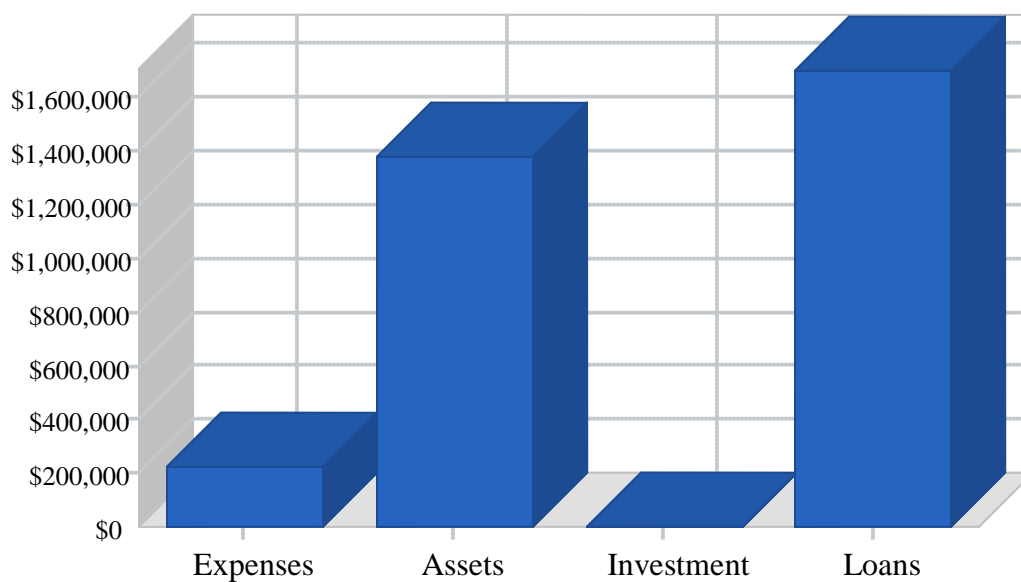


Figure 2. Startup Requirements



## **PRODUCTS**

Horn of Plenty will grow, process, package and sell teff grain and flour for Ethiopian consumption. We will package our teff products in 10, 25 and 100 kilogram reusable sacks containing the Horn of Plenty logo. Management will rely on customer feedback, suggestions and sales reports to improve our teff quality and packaging sizes and distribution networks.

## MARKET ANALYSIS SUMMARY

Horn of Plenty will target two predominantly female market segments—young housewives and small *injera*-baking business owners. Of these two segments, individual households represent the greatest market potential since most *injera* in Ethiopia is still made at home. Beginning with households in Addis Ababa, Horn of Plenty will eventually expand its marketing to other major urban centers in Ethiopia (e.g. Mekele, Dire Dawa, Nazret). It is estimated that there are currently three million people living in Addis Ababa (CIA, 2003). Based on an average number of five persons per household, we estimate a total market in Addis Ababa of 600,000 households. Horn of Plenty initially aims to attract those households and small businesses located in the southern half of the city. Thus our initial target market will include approximately 300,000 households and 5,000 small business bakers. To reach these customers, Horn of Plenty will create its initial distribution center near the Kera market in central/southern Addis Ababa. We estimate a growth rate of 10%, expanding our operations in Year Five by adding new distribution centers near the Saris and Merkato shopping areas.

### Market Segmentation

Horn of Plenty will appeal to predominantly female customers who are the primary bakers of *injera* for home and commercial use. Our focus is on consumers who are socially conscious, health/quality conscious and motivated by convenience. By offering high-quality, chemical-free teff, we appeal to the housewife who wants healthier food for her family. We also appeal to the small business *injera*-bakers who supply *injera* to restaurants and stores. These bakers may or may not be as health conscious as individual housewives, but as high-volume producers of *injera* they are in need of support services (like door-to-door delivery) and concerned about the quality of pre-milled teff flour.

Horn of Plenty's focus on empowering subsistence farmers and ensuring that food is grown in Ethiopia *for* Ethiopians (versus for export) appeals to the consumer who is concerned about food security in Ethiopia, price controls on food staples and the empowerment of "the little guy" (like these small business owners themselves). We want our customers to know that they can contribute to bettering the lives of their fellow citizens by purchasing high-quality healthy teff products from our company. With the support of our customers, Horn of Plenty strives to transform Ethiopia into a land of plenty. The value on Ethiopians helping Ethiopians is integral to our business model.

Table 2. Market Analysis

		Year 1	Year 2	Year 3	Year 4	Year 5	
Potential Customers	Growth						CAGR
Households	10%	200,000	220,000	242,000	266,200	292,820	10.00%
Small Businesses	10%	5,000	5,500	6,050	6,655	7,321	10.00%
<b>Total</b>	<b>10.00%</b>	<b>205,000</b>	<b>225,500</b>	<b>248,000</b>	<b>272,855</b>	<b>300,141</b>	<b>10.00%</b>

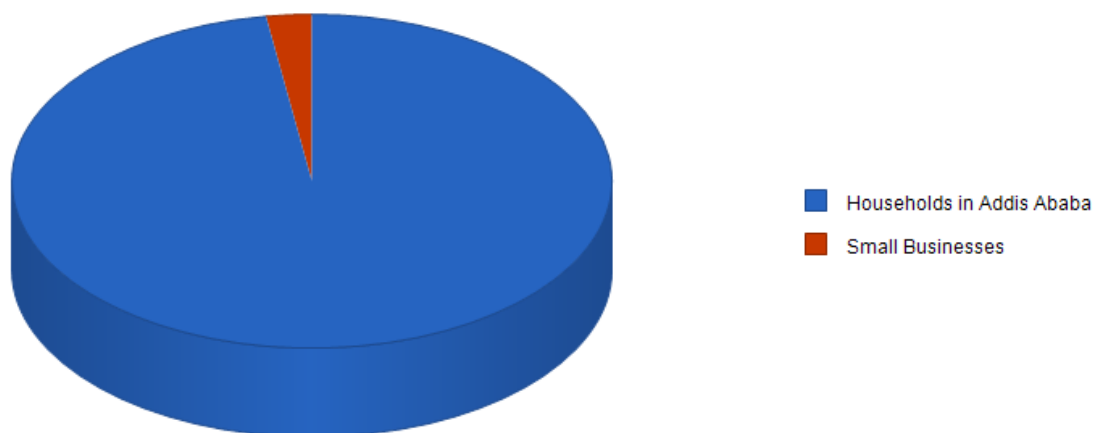


Figure 3. Market Analysis (Pie)

### **Target Market Segment Strategy**

Currently, housewives and *injera*-bakers feel they must inspect the raw teff grain at the mill before it is milled to ensure quality. This puts the burden of quality control and transport of grain and/or flour on the individual consumer. Horn of Plenty will do this work for the consumer by ensuring the quality of our teff flour and providing a delivery service to regular customers who buy sufficient quantity.

**Younger Housewives.** Since most teff is bought by women (either housewives or house workers) Horn of Plenty's primary target will be women between the ages of 20 to 40 years old. We will focus on this younger generation of women since they will be the most health conscious and open to the innovation of purchasing pre-ground teff and establishing a new brand loyalty. Most of these housewives/house workers don't have the time to buy raw teff and then take it to the local teff mill (the standard current practice). Consequently, providing reasonably-priced, high-quality pre-processed teff *flour* (versus just raw teff) in packaging that is sized for home use will appeal to these housewives as a unique combination of convenience and quality.

**Contractor Injera Bakers.** In general, stores, restaurants, organizations will buy wholesale *injera* for retail sale from small injera-baking contractors. These contractors are usually home-based businesses run by women who produce several hundred *injera* on a daily basis. These contractors will be looking for teff grain and flour in larger quantities. Horn of Plenty will initially target these home-based businesses in the southern half of Addis Ababa, expanding to those in the greater metropolitan area and then eventually into other urban centers. We hope to attract these contractors to our conveniently located distribution centers and eventually develop a delivery service of teff flour to those contractors who choose to buy pre-processed flour from us. Ethiopian women involved in *injera* production tend to be traditional in outlook, with strong religious convictions as Ethiopian Orthodox, Protestant Christians or Muslims. They are keenly aware of the impact of the price of staple goods on the working poor and are often involved in caring in some way for the poor even if they themselves are people of limited means. As such, these women already believe in Horn of Plenty's mission to empower the poor, they just do not have a way to connect their everyday use of teff with this endeavor. By setting up a business model that allows these women to "shop for good", Horn of Plenty amplifies their individual impact for social good in much the same way that TOM's Shoes does for its customers in the USA. In marketing to both these segments, Horn of Plenty will emphasize that it donates a portion of all sales to organizations in Ethiopia that feed orphans, street children, families affected by HIV-Aids and famine victims.

## **Industry Analysis**

Teff is the staple grain of Ethiopia and is predominantly grown in the states of Oromo, Amhara, Tigray and on the outskirts of Addis Ababa, Ethiopia. Most teff is produced by subsistence farmers who can only market their teff locally because they have very limited means of transportation (e.g. by donkey or cart). Those who do not possess livestock for transportation might contract trucks and take their teff to a local market, but few actually bring their teff to a broader regional market. The Ethiopian supply chain for teff primarily involves small holder farmers selling their grain to wholesalers who distribute the raw grain to a *wofchobeit* (grain mill) that then allows consumers to select the teff they want, clean it and grind it themselves on the premises. Since Horn of Plenty would be grinding and distributing its own teff, its primary competitors would be these wholesalers and grain mills.

According to the Ethiopian Ministry of Agriculture, there are only twenty-four commercial farms registered in Ethiopia. Of these twenty-four only three grow grain. It appears that most of the cereal crops produced by the commercial farms are for export to the Middle East and India. Consequently, Horn of Plenty has little competition from large farming competitors. Rather, Horn of Plenty is marketing its teff against other smallholder farmers in proximity to Addis Ababa and one or two commercial farms/state run farms.

## **Competition and Buying Patterns**

Consistent availability and quality at a reasonable price are the factors that matter most for our customers. When purchasing teff, both retail and wholesale consumers want friendly, helpful and knowledgeable salespeople to guide them to the proper kind of teff (white, brown and mixture teff). Ethiopian culture is very relational; consequently consumers will tend to look for a teff supplier (usually a *wofchobeit* or grain mill) that they can trust that is located in close proximity to their neighborhood. Consumers identify their *wofchobeit* either through word of mouth or television/radio advertising. If a *wofchobeit* provides a quality product and treats them well they will become repeat customers for that supplier. Horn of Plenty's primary competition is with these independently owned *wofchobeits* that are located in almost every neighborhood throughout the city.

Rather than modeling our distribution on this traditional system, Horn of Plenty will attract customers to its initial distribution center by offering fresh *injera* (traditional Ethiopian bread made of teff) samples, pre-processed and packaged teff flour, multiple teff sack sizes (10, 25, and 100 kg), well-trained sales associates, and customer support personnel who can help our customers transport their purchase. For wholesale customers who buy in sufficient bulk, we will provide a delivery service. Excellent service, convenience, consistent teff availability and quality, affordable pricing, and our commitment to give back to Ethiopian society will help Horn of Plenty attract and retain a loyal customer base.

## **WEB PLAN SUMMARY**

Horn of Plenty will develop a basic informational website in Year One. As of 2012, the majority of our Ethiopian customers do not regularly use the internet for shopping or informational purposes since internet access in Ethiopia is costly and unreliable.

However, our expectation is that this reality will shift dramatically in the next ten years as Ethiopia becomes increasingly web connected. Consequently our long-term web strategy will focus on being a step (but not several steps) ahead of the Ethiopian market in terms of web-based commerce.

Initially, the primary focus for our website will be providing information and motivation in the form of human interest stories that provide our internet-savvy stakeholders (primarily investors and interested friends in the U.S. and Europe) with a way to connect to our mission. We recognize that investors and interested stakeholders need a way to see, hear and support Horn of Plenty's success in the critical first years of operation. Our informational website and founder's blog will enable these stakeholders to learn more about Horn of Plenty and stay connected to our mission.

### **Website Marketing Strategy**

The focus of Horn of Plenty's web presence is the creation of a global community of interested stakeholders that believe in our mission of re-envisioning Ethiopia as a land of plenty. Therefore, our web marketing strategy will target the following groups:

- Investors
- The web-connected Ethiopian Diaspora
- Socially-conscious professionals who may become investors/partners
- Governmental, NGO's and faith-based organizations who share our interest in Ethiopian development

In some sense, our website will be Horn of Plenty's real presence outside of Ethiopia. However, since our focus is primarily informational and our web budget is limited, we will not purchase expensive banner ads, etc. Rather, we will focus on creating links in social networks (Facebook, LinkedIn, and Twitter), on-line reviews/articles and the websites of development organizations and faith-based groups that are already working in Ethiopia. Eventually we may purchase banner ads on websites and on-line magazines focused on the Ethiopian Diaspora (e.g. Tadias.com, ethiopianreview.com, nazret.com) in order to facilitate word-of-mouth in the international Ethiopian community that would then influence our customer base in Ethiopia.

### **Development Requirements**

While our website is important in establishing a reputable international presence, it will not significantly affect sales in Ethiopia. Consequently, efforts will be made to keep web costs low. We will leverage our relationships with web developers in the Silicon Valley (Brian Campbell, DaySpring Technologies, etc.) to create an attractive but simple web

site at low-to-no-cost that is sustainable without hiring a full-time web manager. Estimated costs are as follows:

- Site Design and implementation - \$5,000
- Website name registration: \$70 per year.
- Site Hosting - \$30 or less per month.
- Search Engine Registration - \$200 per year.

## **STRATEGY AND IMPLEMENTATION SUMMARY**

Horn of Plenty's mission is to create prosperity for former subsistence farmers and an abundant food supply for the Horn of Africa. The current scarcity and high price of teff ensures a high demand for our product. Thus, our marketing and sales strategy is simple: build loyal relationship with teff end-users by providing a conveniently accessed, high-quality product at a reasonable price. Our strategy for raising the agricultural productivity and standard of living of subsistence farmers is more complex and depends upon creating a viable commercial-scale farming operation that enables farmers to obtain equity in the company while earning a living wage.

### **SWOT Analysis**

Horn of Plenty is entering the Ethiopian marketplace at a critical juncture. Ethiopia has one of the fastest growing economies in the world with an annual growth rate of 7.5% per year according to The World Factbook (CIA, 2003). At the same time, due to global climate change and the agricultural land grab by Chinese, Indian and Saudi companies, Ethiopia faces serious, recurrent food shortages and increasing prices on staples like teff. The need for a consistent, affordable supply of food is great and the opportunity to become a major player in the production of that food is also significant. Horn of Plenty is poised to take advantage of this once-in-a-lifetime opportunity by entering the teff marketplace with a new vision for Ethiopian agriculture.

The major shifts in the Ethiopian economy created by globalization also pose serious threats to new ventures. The Ethiopian government is increasingly welcoming of foreign investment, but continues to hold title to all Ethiopian land. Foreign investors therefore enter the agricultural market at the risk of losing their land if the government suddenly shifts or decides to seize land that has been leased to investors. Ethiopian government and business is not known for its transparency; consequently, dealing with corruption, tedious bureaucracy and nepotism is a real threat to any business' success. Horn of Plenty will need to find a way to navigate in this environment without compromising its stated values.

Horn of Plenty's greatest strengths are found in its innovative approach to empowering Ethiopian farmers while meeting basic needs for food stability. Fresh ideas that re-envision Ethiopia as a land of plenty, assistance from American agricultural experts and investors, as well as the dedication and cross-cultural skills of its founder, are what position Horn of Plenty to make a difference at this time of significant opportunity in Ethiopia.



**Strengths.**

- Low costs for land and labor in Ethiopia
- This decade is a critical juncture in Ethiopian economic development, the Ethiopian government is providing strong incentives to foreign investment as well as resources for agricultural development
- Ethiopian-American founder is highly motivated, well-trained, bicultural and trilingual.
- Strong relationships with American venture capitalists, agricultural and business mentors
- Horn of Plenty's business plan is unique, offering an innovative approach to a staple product as well as a way for both our Ethiopian customers and our American investors to contribute to bettering the lives of subsistence farmers.

**Weaknesses.**

- No capital in hand.
- Lack of direct experience in Ethiopian agriculture
- Will take time to educate and train subsistence farmers to farm using modern agricultural methods
- Forging an American-Ethiopian corporation may prove to be more difficult than expected.

**Opportunities.**

- Increasing political stability in Ethiopia. The Ethiopian government is eager to foster development partnerships with expatriates.
- The Ethiopian government is eager to replace subsistence farming with commercial farming
- The improved infrastructure system in Ethiopia will make it possible to transport our product efficiently.
- Profound need for food stability in Ethiopia
- Animosity of local farmers toward foreign agricultural land-grab makes them more open to cooperation that will allow them to scale-up production. Horn of Plenty is positioned to help these farmers direct their sense of outrage into positive efforts.
- No prepackaged teff currently available on the market.

**Threats.**

- Bureaucracy and corruption in Ethiopian government could cripple efforts
- Crop loss due to natural disasters (drought, hail, etc.)
- Potential difficulties obtaining water rights, land and/or equipment in Ethiopia.
- Difficulties obtaining and retaining honest employees who have sufficient education to participate in the complexities commercial-scale agriculture.
- Copycat producers may take our model and sell it with lower quality teff, potentially ruining our reputation.

### **Competitive Edge**

Reliability and convenience are Horn of Plenty's primary competitive edges. We provide customers with *reliably* high-quality teff flour at a reasonable price (a feature that our customers can not currently count on from their local *wofchobeit*). Our packaging of teff (an innovation in the teff market), our strategic location in major shopping areas and our delivery service all make Horn of Plenty a convenience leader. By emphasizing customer convenience we achieve a significant competitive edge over our more traditional competitors who put the burden of choosing, milling and transporting teff on the customer.

Horn of Plenty's other competitive edge is its unique dedication to Ethiopia's overall development. Our goal is incrementally increase our percentage of gross sales donated to NGO's in Ethiopia that feed the needy (while maintaining profitability for our corporation and a living wage for our Farmer Associates) with a target of 10% of gross sales donated each year by Year Ten. Horn of Plenty's unique approach to food security allows consumers to amplify their impact for good while providing for one of their own basic needs.

### **Marketing strategy**

Horn of Plenty's ultimate mission is to transform Ethiopia into a land of plenty by enlisting the support of all of its stakeholders. Consequently, our marketing strategy will focus on creating a loyal customer base among housewives and female small business owners in and around Addis Ababa by providing a superior product and excellent customer service.

The primary means of advertisement will be through television and radio ads, targeted at women viewers/listeners since a significant percentage of the small business owners are illiterate or semi-literate. Through advertisements and via our personal sales force, we will also target the traditional Ethiopian social networks such as *eder* (a funeral support group) and *mahaber* (an Ethiopian Orthodox social support group) by offering group discounts. Using a similar concept to the Groupon or internet social networking, we will tap into the powerful Ethiopian word of mouth network (an innovation in Ethiopian marketing). In this way, we will create a "community of communities" that are loyal consumers of Horn of Plenty and stakeholders in Horn of Plenty's mission of transformation.

Initially, a significant portion of revenues of Horn of Plenty's budget will go for television/radio ads and the base salary for our sales force. As customer loyalty grows, we will pull back on our advertising budget and rely increasingly on word of mouth.

## **Sales Strategy**

Horn of Plenty's goal is to create customer loyalty and positive word-of-mouth advertising by providing a superior product with effective customer service.

Consequently, Horn of Plenty will:

- Utilize Retail Star POS software with every sales transaction. With each phone or delivery purchase the software will record and maintain in its database the customer's name, address and purchases. From time to time, direct mail promotions and reports about our humanitarian endeavors will be sent to these customers to develop interest and ownership in Horn of Plenty's mission.
- Employ two sales associates to do door-to-door marketing and sales. These associates will promote Horn of Plenty by distributing teff samples and coupon punch cards, encouraging housewives and *injera* bakers to give Horn of Plenty teff a try. They will also take orders for teff delivery of 100 kilograms or more. These sales associates will receive a commission for each sale and an additional bonus for return customers.
- Take phone and in person orders at our distribution center. As web capability expands in Ethiopia, on-line ordering may also become a possibility.

## **Sales Forecast**

The following table shows Horn of Plenty's five-year sales forecast. Given the price and scarcity of teff in Ethiopia at this time, we estimate that we can sell as much teff as we can produce. The numbers for our sales forecast were determined using data from the Ethiopian Ministry of Agriculture (MORAD), University of Nevada Cooperative Extension (UNCE), and reported by Elleni Araya in Addis Fortune magazine. According to the UNCE study, teff grown with modern methods should yield 1 ton/acre. Estimated production is based on working 300 acres of farmland for the first four years.

A 300 acre farm yields 300 tons (272,155 kilogram) of teff per season with three growing seasons per year for a total of 816,466 kilos per year. We calculated our teff price at the current market price for first and second grade teff. We will be selling our first grade teff at \$ .90 per kilogram and second grade teff at \$0.78 per kilogram. The table uses an average cost of production and the varied sales price for two grades of teff (white and brown), assuming 150 acres per grade. We estimate the growth rate of sales at 5% annually based on inflation (which is currently quite high in Ethiopia). In Year Five the price of teff is estimated to be \$1.15 for first grade teff and \$1.03 for second grade teff based on inflation. During this year, Horn of Plenty will acquire a total of 50 more acres which accounts for our increased production and sales.

Table 3. Yearly Sales Forecast

Sales Forecast					
<b>Sales</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>	<b>Year 5</b>
White Teff	\$366,492	\$384,816	\$403,141	\$421,466	\$518,035
Brown Teff	\$318,423	\$334,343	\$350,264	\$366,185	\$452,186
<b>Total Sales</b>	<b>\$684,915</b>	<b>\$719,159</b>	<b>\$753,405</b>	<b>\$787,651</b>	<b>\$970,221</b>
<b>Direct Cost of Sales</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>	<b>Year 5</b>
White Teff	\$128,064	\$128,064	\$128,064	\$128,064	\$134,467
Brown Teff	\$128,064	\$128,064	\$128,064	\$128,064	\$134,467
<b>Total Direct Cost of Sales</b>	<b>\$256,128</b>	<b>\$256,128</b>	<b>\$256,128</b>	<b>\$256,128</b>	<b>\$268,934</b>

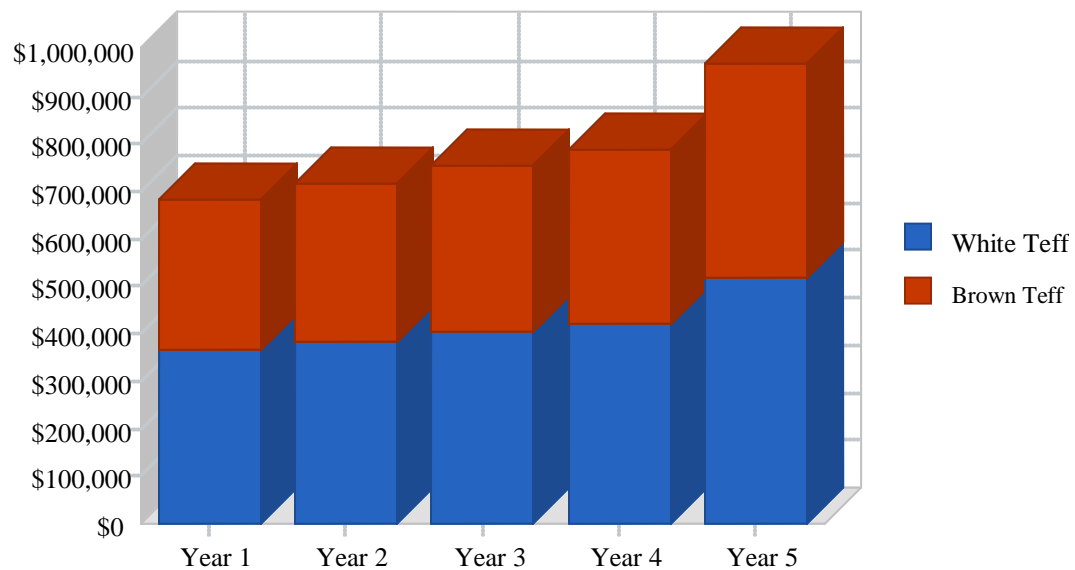


Figure 4. Sales by Year

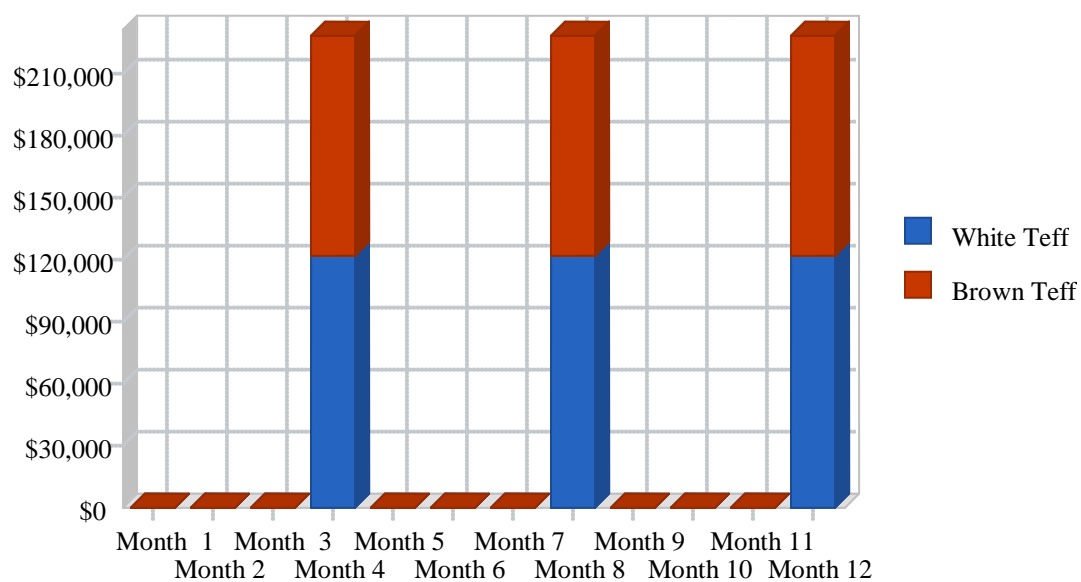


Figure 5. Sales by Month

Table 4. Monthly Sales Forecast

	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12
<b>Sales</b>												
White Teff	\$0	\$0	\$0	\$122,164	\$0	\$0	\$0	\$122,164	\$0	\$0	\$0	\$122,164
Brown Teff	\$0	\$0	\$0	\$106,141	\$0	\$0	\$0	\$106,141	\$0	\$0	\$0	\$106,141
<b>Total Sales</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$228,305</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$228,305</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$228,305</b>
<b>Direct Cost of Sales</b>	<b>Month 1</b>	<b>Month 2</b>	<b>Month 3</b>	<b>Month 4</b>	<b>Month 5</b>	<b>Month 6</b>	<b>Month 7</b>	<b>Month 8</b>	<b>Month 9</b>	<b>Month 10</b>	<b>Month 11</b>	<b>Month 12</b>
White Teff	\$10,672.00	\$10,672	\$10,672	\$10,672	\$10,672	\$10,672	\$10,672	\$10,672	\$10,672	\$10,672	\$10,672	\$10,672
Brown Teff	\$10,672	\$10,672	\$10,672	\$10,672	\$10,672	\$10,672	\$10,672	\$10,672	\$10,672	\$10,672	\$10,672	\$10,672
<b>Subtotal Direct Cost of Sales</b>	<b>\$21,344</b>	<b>\$21,344</b>	<b>21,344</b>	<b>\$21,344</b>	<b>\$21,344</b>	<b>\$21,344</b>	<b>\$21,344</b>	<b>\$21,344</b>	<b>\$21,344</b>	<b>\$21,344</b>	<b>\$21,344</b>	<b>\$21,344</b>

## **MANAGEMENT SUMMARY**

Horn of Plenty is founded and operated by Ephrem Teklu Phifer-Houseman as the CEO. Mr. Phifer-Houseman is responsible for oversight of the entire organization and the interface with American investors. The organizational chart for Horn of Plenty is found in Figure 6 below.

Horn of Plenty's mission depends upon the success of its Farmer Associates (former subsistence farmers who wish to join Horn of Plenty in order to raise their standard of living while learning modern farming techniques). We project an initial group of thirty Farmer Associates who will work as members of the Horn of Plenty farming team and receive a living wage, medical and educational benefits, and a yearly share of company stock as compensation.

Farmer Associates will be trained to participate in all aspects of farm construction, design and planning of the new crop season, harvesting, as well as milling and packaging. Two Farmer Associate Team Leaders will report to the CEO as part of Horn of Plenty's Management Team and be primarily responsible for managing farm production. As CEO, Mr. Phifer-Houseman will work closely with these leaders and the whole farming team in the management of the farm and mill. A mill foreman will be primarily responsible for the full-time milling team of five mill operators and two truck drivers. He will oversee milling, packaging and transportation of teff in coordination with the Distribution Center. The Mill Foreman will report to the CEO as a member of the management team.

Our initial distribution center in Addis Ababa will have four employees (two sales associates and two stock workers) managed by our Distribution Center Manager, another member of the management team. The Distribution Center Manager is primarily responsible for inventory management, sales and marketing of Horn of Plenty's product line. The final member of the management team will be Horn of Plenty's Chief Financial Officer/Accountant who will be supported by an administrative assistant/bookkeeper and responsible for record keeping, cost containment, tax filing and all the financial concerns of the company. An additional administrative assistant will support the CEO. As Horn of Plenty grows, we will add additional departmental roles as needed.

### **Personnel Plan**

Horn of Plenty's personnel plan is included in the following table. Salary standards for the CEO are based upon modest American salary standards (the CEO is investing \$50K of deferred salary in the company each year for the first five years). Salaries for Ethiopian staff reflect a generous Ethiopian salary standard and include health benefits, education benefits and a retirement plan. Sales associates will also receive a commission on cold-call sales and repeat customers. In Ethiopia these benefits are rare for farmers, mill workers, office assistants, drivers, etc. This reflects Horn of Plenty's stated purpose of raising the standard of living of its employees and associates. The salaries for the accountant and office assistants were determined through an interview with Ruth

Kennedy of Abraham's Oasis an Ethiopian NGO located in a predominantly rural area. Salaries for the central office and distribution center employees are estimated from the CEO's previous experience in Ethiopia and interviews with current Ethiopian businesspeople. Salaries will remain stable for the first five years unless the company is more profitable than initially projected.

Table 5. Personnel

	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>	<b>Year 5</b>
CEO (1)	\$10,200	\$10,200	\$10,200	\$10,200	\$10,200
Accountant(1)	\$4,200	\$4,200	\$4,200	\$4,200	\$4,200
Mill Foreman (1)	\$1,100	\$1,200	\$1,200	\$1,200	\$1,200
Mill workers (5)	\$3,375	\$3,375	\$3,375	\$3,375	\$3,375
Distribution Center Manager	\$1,100	\$1,200	\$1,200	\$1,200	\$1,200
Distribution Center Employee (4)	\$2,700	\$3,600	\$3,600	\$3,600	\$3,600
Truck Driver (2)	\$1,350	\$1,800	\$1,800	\$1,800	\$1,800
Farmer Associates (30)	\$36,000	\$36,000	\$36,000	\$36,000	\$36,000
Office assistant (2)	\$4,200	\$4,200	\$4,200	\$4,200	\$4,200
Maintenance worker (1)	\$900	\$900	\$900	\$900	\$900
Total Employees	23	23	23	23	23
<b>Total Payroll</b>	<b>\$65,125</b>	<b>\$66,675</b>	<b>\$66,675</b>	<b>\$66,675</b>	<b>\$66,675</b>



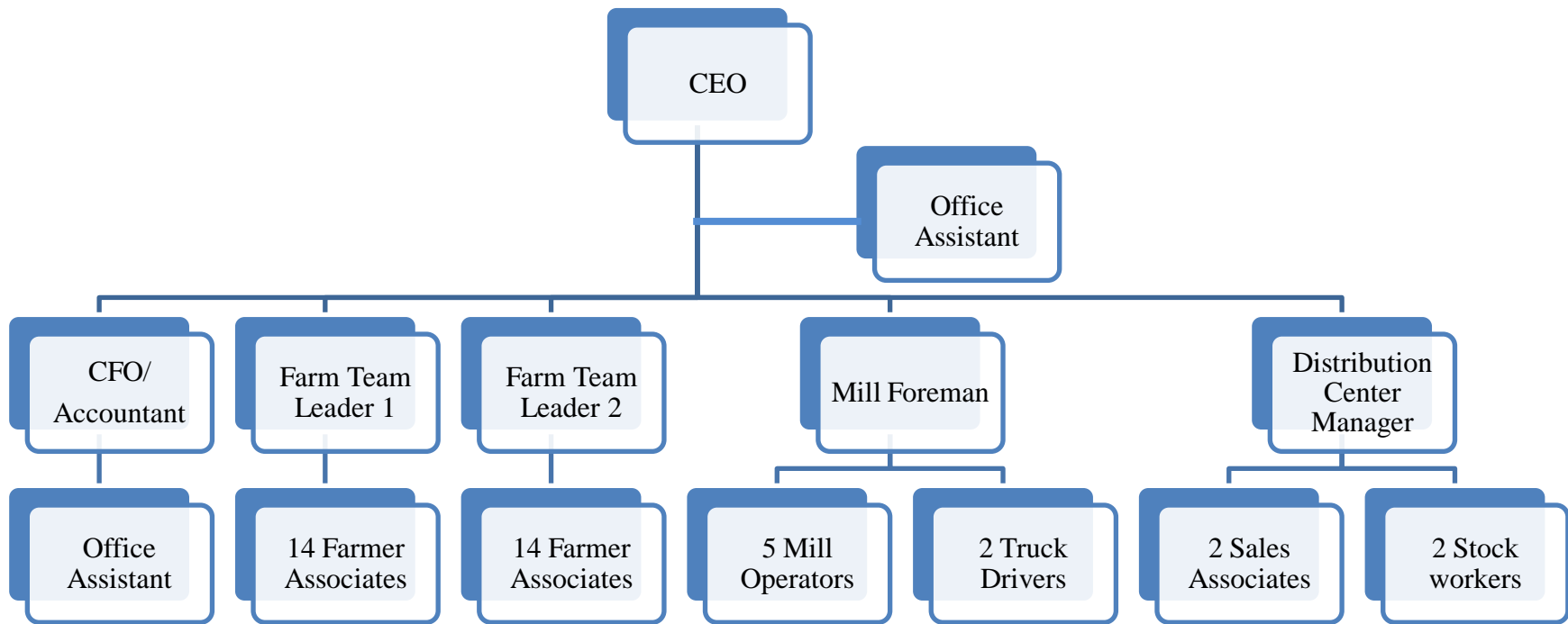


Figure 6. Horn of Plenty Organizational Chart

## **FINANCIAL PLAN**

Horn of Plenty's financial plan is optimistic but dependable, given its distance from the facts on the ground in Ethiopia. It begins as a conservative, small-scale operation in order to test feasibility, but has the potential for exponential growth. The plan depends upon obtaining development-oriented and humanitarian loans from the Overseas Private Investment Corporation (OPIC) and private philanthropists (see Startup Funding) as well as the favorable tax and tariff conditions in Ethiopia for foreign investment. Given the once-in-a-lifetime opportunity (and need) for development and food security in Ethiopia, the plan is both realistic and optimistic. In the next decade, the explosive land-grab in Ethiopia will be used either for the good of the Ethiopian people or for their exploitation. Horn of Plenty proposes to use this opportunity to foster development rather than economic colonization.

## **Startup Funding**

Horn of Plenty's start up funding will rely on :

- An OPIC (Overseas Private Investment Corporation) loan of \$1,300,000 loan at 6% interest over 15 years secured by our equipment
- \$200,000 in deferred salary from the owner/CEO at \$50/K for the first 5 years of operation.
- \$200,000 in interest-free loans from friends, family and interested philanthropists in our Tom-to-Tesfaye sponsorship program between American sponsors and Ethiopian Farmer Associates.

Table 6. Startup Funding

Startup Expenses to Fund	\$223,748
Startup Assets to Fund	\$1,379,106
<b>Total Funding Required</b>	<b>\$1,602,854</b>
<b>Assets</b>	
Non-cash Assets from Startup	\$1,279,106
Cash Requirements from Startup	\$100,000
Additional Cash Raised	\$97,146
Cash Balance on Starting Date	\$197,146
<b>Total Assets</b>	<b>\$1,476,252</b>
<b>Liabilities and Capital</b>	
Liabilities	
Current Borrowing	\$0
Long-term Liabilities	\$1,300,000
Accounts Payable (Outstanding Bills)	\$0
Other Current Liabilities (interest-free)	\$400,000
<b>Total Liabilities</b>	<b>\$1,700,000</b>
Loss at Startup (Startup Expenses)	(\$223,748)
Total Capital	(\$223,748)
Total Capital and Liabilities	\$1,476,252
<b>Total Funding</b>	<b>\$1,700,000</b>

## **Important Assumptions**

The corporate income tax rate for Ethiopian corporations is normally 30%. However, profit tax exemptions are given to new investors in agribusiness for at least two years and potentially up to eight years (if a petition for exemption is accepted). <http://www.bds-ethiopia.net/investment-policy.html>. In this plan a 0% tax rate is assumed for the first five years, in the hope that our petition for tax exemption will be accepted on humanitarian grounds for at least the first eight years of operation.

### **Break-even Analysis**

According to our break-even analysis, Horn of Plenty needs to reach revenue of \$42,000/month to break even. Given that our first month of sales will occur in Month Four after planting and we project a total of \$228,305 in sales from Month Four through Seven, Horn of Plenty should be breaking even by Month Four of our first year of operation.

Table 7. Break-even Analysis

Monthly Revenue Break-even	\$41,221
Assumptions:	
Average Percent Variable Cost	37%
Estimated Monthly Fixed Cost	\$25,806

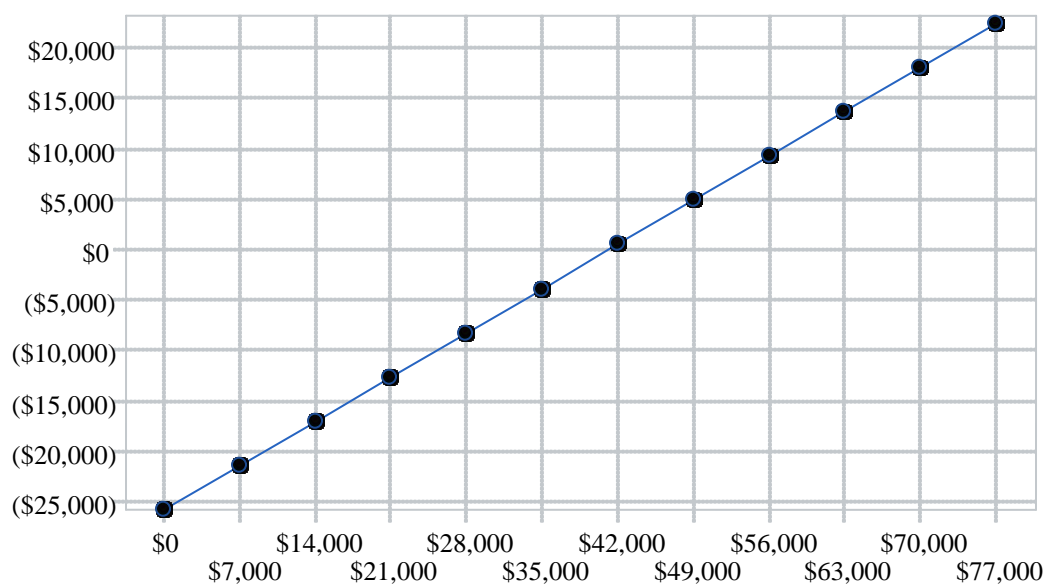


Figure 7. Break-even Analysis

### **Projected Profit And Loss**

For the purposes of this plan, initial sales of teff are projected to begin in the fourth month after planting. Obviously, not all teff harvested in Month Three will be sold by the end of Month Four, although this is how the figures have been listed in this plan for the sake of simplicity. However, given the continuing scarcity of teff supplies in Ethiopia we can confidently project that we will be able to sell all the teff harvested in each of the three growing seasons *before* the next season's harvest. In our profit and loss table and charts, months Four, Eight and Twelve account for all sales of teff during the first year of operation, though in reality some of those sales will occur from Month Five onward.

Due to low labor costs and the favorable investment environment in Ethiopia, Horn of Plenty projects a gross margin of almost 63% even in Year One, rising to 72% in Year Five after our expansion to an additional fifty acres. Coupled with the Ethiopian tax exemption for new agribusiness investors this allows the company to be marginally profitable even in its first year of operation, with a net profit of \$54,113 or almost 8%. By Year Five this profit percentage jumps to over 30%, even with an increased charitable donation rate of 5% of total sales.

Table 8. Profit and Loss

	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>	<b>Year 5</b>
<b>Sales</b>	\$684,915	\$719,159	\$753,405	\$787,651	\$970,221
Direct Cost of Sales	\$256,128	\$256,128	\$256,128	\$256,128	\$268,934
Other Costs of Sales	\$0	\$0	\$0	\$0	\$0
<b>Total Cost of Sales</b>	<b>\$256,128</b>	<b>\$256,128</b>	<b>\$256,128</b>	<b>\$256,128</b>	<b>\$268,934</b>
Gross Margin	\$428,787	\$463,031	\$497,277	\$531,523	\$701,287
Gross Margin %	62.60%	64.39%	66.00%	67.48%	72.28%
<b>Expenses</b>					
Payroll	\$65,125	\$66,675	\$66,675	\$66,675	\$66,675
Marketing/Promotion	\$24,000	\$24,000	\$24,000	\$24,000	\$24,000
Depreciation	\$21,936	\$10,967	\$7,312	\$5,484	\$4,387
Farm Land Lease	\$145,692	\$145,692	\$145,692	\$145,692	\$147,692
Distribution Center Lease	\$15,000	\$18,000	\$18,000	\$18,000	\$18,000
Mill Lease/Mortgage	\$1,700	\$2,040	\$2,040	\$2,040	\$2,040
Utilities	\$1,600	\$1,800	\$1,800	\$1,800	\$1,800
Insurance	\$18,000	\$18,000	\$18,000	\$18,000	\$18,000
Payroll Taxes	\$9,769	\$10,001	\$10,001	\$10,001	\$10,001
Charitable Donation	\$6,852	\$14,383	\$22,602	\$31,506	\$48,511
<b>Total Operating Expenses</b>	<b>\$309,674</b>	<b>\$311,558</b>	<b>\$316,122</b>	<b>\$323,198</b>	<b>\$341,106</b>
Profit Before Interest & Taxes	\$119,113	\$151,473	\$181,155	\$208,324	\$360,181
EBITDA	\$141,049	\$162,440	\$188,467	\$213,808	\$364,568
Interest Expense	\$65,000	\$63,957	\$61,820	\$59,575	\$57,219
Taxes Incurred	\$0	\$0	\$0	\$0	\$0
<b>Net Profit</b>	<b>\$54,113</b>	<b>\$87,516</b>	<b>\$119,335</b>	<b>\$148,749</b>	<b>\$302,962</b>
<b>Net Profit/Sales</b>	<b>7.90%</b>	<b>12.17%</b>	<b>15.84%</b>	<b>18.89%</b>	<b>31.23%</b>

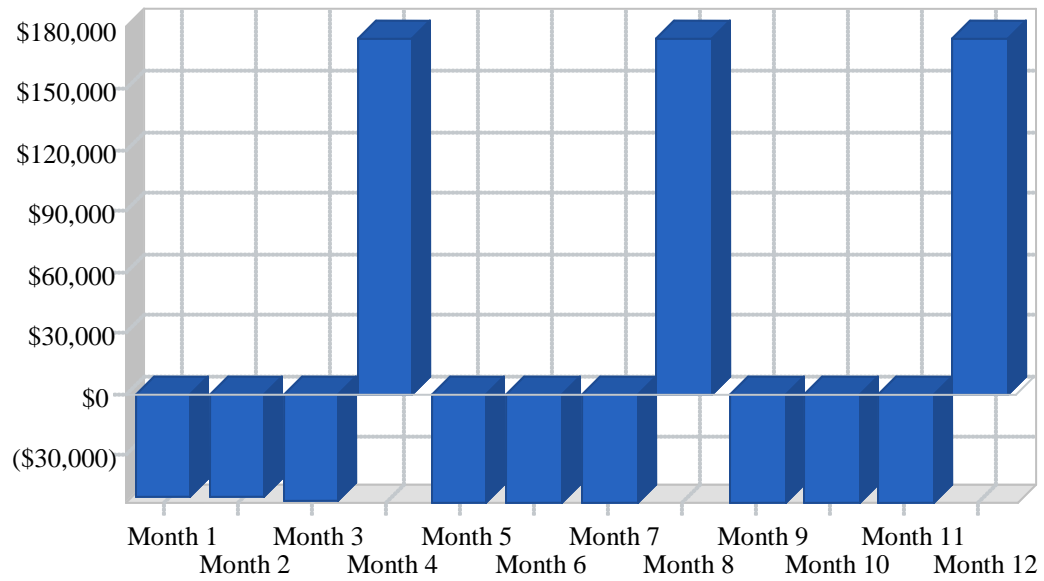


Figure 8. Profit Monthly

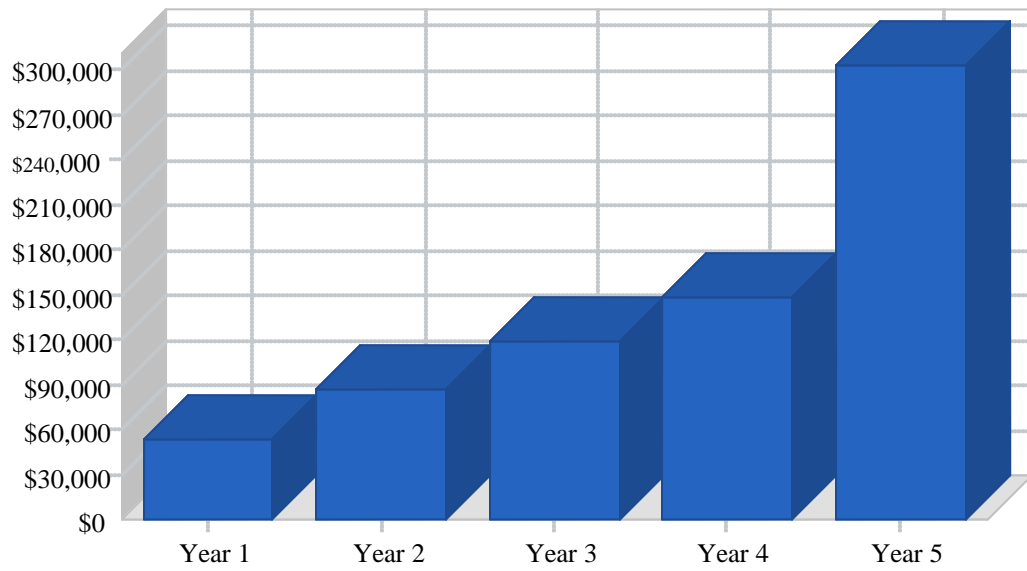


Figure 9. Profit Yearly

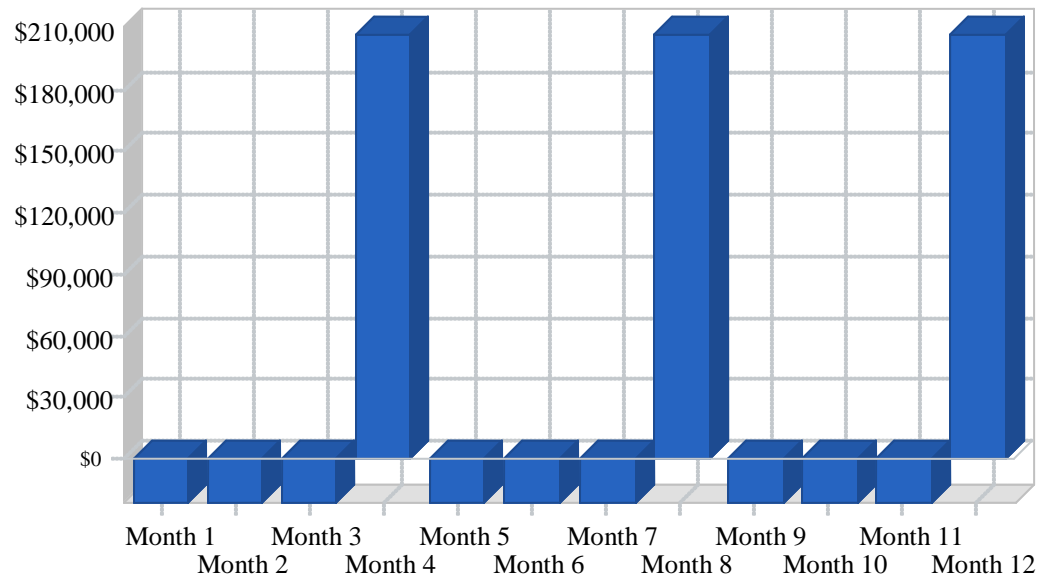


Figure 10. Gross Margin Monthly

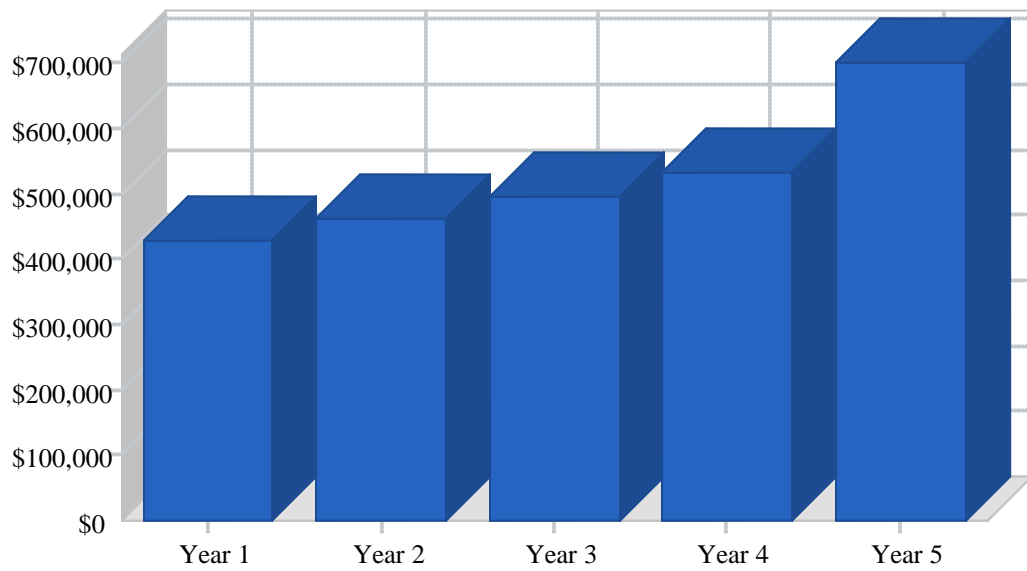


Figure 11. Gross Margin Yearly



### **Projected Cash Flow**

Cash flow projections are critical to our success. The following table shows cash flow for the first five years, and the chart illustrates monthly cash flow in the first year. Monthly cash flow projections are included in the appendix. Adequate start up funding allows Horn of Plenty to operate with a positive cash balance even during the first three months of operation before our initial harvest.

Table 9. Cash Flow

	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>	<b>Year 5</b>
<b>Cash Received</b>					
Cash from Operations					
Cash Sales	\$684,915	\$719,159	\$753,405	\$787,651	\$970,221
<b>Subtotal Cash from Operations</b>	<b>\$684,915</b>	<b>\$719,159</b>	<b>\$753,405</b>	<b>\$787,651</b>	<b>\$970,221</b>
<b>Additional Cash Received</b>					
Sales Tax, VAT, HST/GST Received	\$102,737	\$107,874	\$113,011	\$118,148	\$145,533
New Current Borrowing	\$0	\$0	\$0	\$0	\$0
New Other Liabilities (interest-free)	\$0	\$0	\$0	\$0	\$0
New Long-term Liabilities	\$0	\$0	\$0	\$0	\$0
Sales of Other Current Assets	\$0	\$0	\$0	\$0	\$0
Sales of Long-term Assets	\$0	\$0	\$0	\$0	\$0
New Investment Received	\$0	\$0	\$0	\$0	\$0
<b>Subtotal Cash Received</b>	<b>\$787,652</b>	<b>\$827,033</b>	<b>\$866,416</b>	<b>\$905,798</b>	<b>\$1,115,754</b>

Table 9. Cash Flow Continued

Expenditures	Year 1	Year 2	Year 3	Year 4	Year 5
<b>Expenditures from Operations</b>					
Cash Spending	\$65,125	\$66,675	\$66,675	\$66,675	\$66,675
Bill Payments	\$563,654	\$552,586	\$559,583	\$566,195	\$599,800
Subtotal Spent on Operations	\$628,779	\$619,261	\$626,258	\$632,870	\$666,475
Additional Cash Spent					
Sales Tax, VAT, HST/GST Paid Out	\$102,737	\$107,874	\$113,011	\$118,148	\$145,533
Principal Repayment of Current Borrowing	\$0	\$0	\$0	\$0	\$0
Other Liabilities Principal Repayment	\$0	\$0	\$0	\$0	\$0
Long-term Liabilities Principal Repayment	\$0	\$41,708	\$43,793	\$45,983	\$48,282
Purchase Other Current Assets	\$0	\$0	\$0	\$0	\$0
Purchase Long-term Assets	\$0	\$0	\$0	\$0	\$0
Dividends	\$0	\$0	\$0	\$0	\$0
Subtotal Cash Spent	\$731,516	\$768,843	\$783,063	\$797,001	\$860,290
<b>Net Cash Flow</b>	<b>\$56,136</b>	<b>\$58,190</b>	<b>\$83,353</b>	<b>\$108,797</b>	<b>\$255,464</b>
<b>Cash Balance</b>	<b>\$253,282</b>	<b>\$311,472</b>	<b>\$394,825</b>	<b>\$503,623</b>	<b>\$759,087</b>

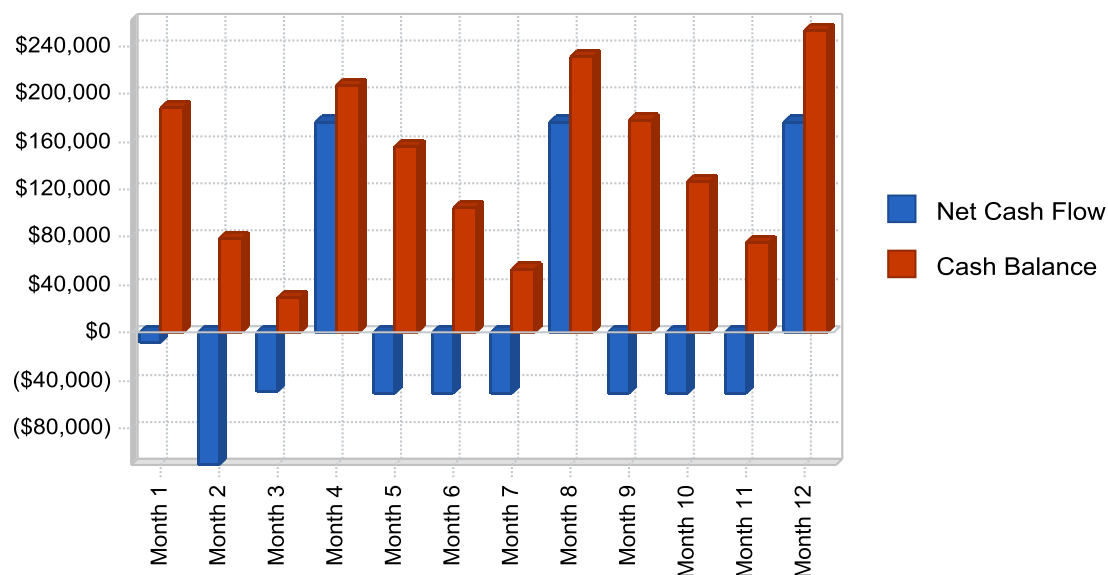


Figure 12. Cash Flow Diagram

### **Projected Balance Sheet**

The projected Balance Sheet for five years is detailed in the following table. Monthly projections for the first year Balance Sheet are available for review in the Appendix. Planned numbers show that liabilities are expected to decrease such that Horn of Plenty will have a positive net worth by Year Three and a net worth and working capital of almost \$500,000 by Year Five.

Table 10. Balance Sheet

<b>Assets</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>	<b>Year 5</b>
<b>Current Assets</b>					
Cash	\$253,282	\$311,472	\$394,825	\$503,623	\$759,087
Inventory	\$64,032	\$64,032	\$64,032	\$64,032	\$70,595
Other Current Assets	\$25,366	\$25,366	\$25,366	\$25,366	\$25,366
<b>Total Current Assets</b>	<b>\$342,680</b>	<b>\$400,870</b>	<b>\$484,223</b>	<b>\$593,021</b>	<b>\$855,048</b>
<b>Long-term Assets</b>					
Long-term Assets	\$1,253,740	\$1,253,740	\$1,253,740	\$1,253,740	\$1,253,740
Accumulated Depreciation	\$21,936	\$32,903	\$40,215	\$45,699	\$50,086
<b>Total Long-term Assets</b>	<b>\$1,231,804</b>	<b>\$1,220,837</b>	<b>\$1,213,525</b>	<b>\$1,208,041</b>	<b>\$1,203,654</b>
<b>Total Assets</b>	<b>\$1,574,484</b>	<b>\$1,621,707</b>	<b>\$1,697,748</b>	<b>\$1,801,062</b>	<b>\$2,058,702</b>
<b>Liabilities and Capital</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>	<b>Year 5</b>
<b>Current Liabilities</b>					
Accounts Payable	\$44,119	\$45,534	\$46,034	\$46,582	\$49,542
Current Borrowing	\$0	\$0	\$0	\$0	\$0
Other Current Liabilities	\$400,000	\$400,000	\$400,000	\$400,000	\$400,000
<b>Subtotal Current Liabilities</b>	<b>\$444,119</b>	<b>\$445,534</b>	<b>\$446,034</b>	<b>\$446,582</b>	<b>\$449,542</b>
Long-term Liabilities	\$1,300,000	\$1,258,292	\$1,214,498	\$1,168,515	\$1,120,233
<b>Total Liabilities</b>	<b>\$1,744,119</b>	<b>\$1,703,826</b>	<b>\$1,660,533</b>	<b>\$1,615,097</b>	<b>\$1,569,775</b>
Paid-in Capital	\$0	\$0	\$0	\$0	\$0
Retained Earnings	(\$223,748)	(\$169,635)	(\$82,119)	\$37,216	\$185,965
Earnings	\$54,113	\$87,516	\$119,335	\$148,749	\$302,962
<b>Total Capital</b>	<b>(\$169,635)</b>	<b>(\$82,119)</b>	<b>\$37,216</b>	<b>\$185,965</b>	<b>\$488,927</b>
<b>Total Liabilities and Capital</b>	<b>\$1,574,484</b>	<b>\$1,621,707</b>	<b>\$1,697,748</b>	<b>\$1,801,062</b>	<b>\$2,058,702</b>
<b>Net Worth</b>	<b>(\$169,635)</b>	<b>(\$82,119)</b>	<b>\$37,216</b>	<b>\$185,965</b>	<b>\$488,927</b>

## **Business Ratios**

Business ratios for the years of this plan are shown below. Industry profile ratios based on the North American Industry Classification (NAICS) code 111199, All Other Grain Farming, are the closest available and are shown to give a baseline comparison since data on business ratios for Ethiopian agriculture is unavailable. Our projected profit before interest and taxes is quite high compared to the NAICS ratio of 5%. We theorize that this is due to extremely low labor cost in Ethiopia. Our financial projections also rely on \$200,000 in short term interest-free loans from philanthropic investors who want to see former subsistence farmers thrive (Tom-to-Tesfaye program). This unusual funding circumstance, coupled with the favorable Ethiopian tax exemption allows us to see a very high return on equity from Year Three forward.

Table 11. Ratios

<b>Ratio Analysis</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>	<b>Year 5</b>	<b>Industry Profile</b>
Sales Growth	n.a.	5.00%	4.76%	4.55%	23.18%	11.24%
<b>Percent of Total Assets</b>						
Inventory	4.07%	3.95%	3.77%	3.56%	3.43%	5.98%
Other Current Assets	1.61%	1.56%	1.49%	1.41%	1.23%	30.68%
Total Current Assets	21.76%	24.72%	28.52%	32.93%	41.53%	40.16%
Long-term Assets	78.24%	75.28%	71.48%	67.07%	58.47%	59.84%
Total Assets	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
Current Liabilities	28.21%	27.47%	26.27%	24.80%	21.84%	15.10%
Long-term Liabilities	82.57%	77.59%	71.54%	64.88%	54.41%	42.26%
Total Liabilities	110.77%	105.06%	97.81%	89.67%	76.25%	57.36%
Net Worth	-10.77%	-5.06%	2.19%	10.33%	23.75%	42.64%
<b>Percent of Sales</b>						
Sales	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
Gross Margin	62.60%	64.39%	66.00%	67.48%	72.28%	70.24%
Selling, General & Administrative Expenses	54.70%	52.22%	50.16%	48.60%	41.06%	11.41%
Advertising Expenses	3.50%	3.34%	3.19%	3.05%	2.47%	0.32%
Profit Before Interest and Taxes	17.39%	21.06%	24.04%	26.45%	37.12%	5.07%
<b>Main Ratios</b>						
Current	0.77	0.90	1.09	1.33	1.90	1.43
Quick	0.63	0.76	0.94	1.18	1.75	1.03
Total Debt to Total Assets	110.77%	105.06%	97.81%	89.67%	76.25%	57.36%
Pre-tax Return on Net Worth	-31.90%	-106.57%	320.66%	79.99%	61.96%	10.63%
Pre-tax Return on Assets	3.44%	5.40%	7.03%	8.26%	14.72%	4.53%

Table 11. Ratios Continued

<b>Additional Ratios</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>	<b>Year 5</b>	<b>Industry Profile</b>
Net Profit Margin	7.90%	12.17%	15.84%	18.89%	31.23%	n.a
Return on Equity	0.00%	0.00%	320.66%	79.99%	61.96%	n.a
<b>Activity Ratios</b>						
Inventory Turnover	4.00	4.00	4.00	4.00	4.00	n.a
Accounts Payable Turnover	13.78	12.17	12.17	12.17	12.17	n.a
Payment Days	27	30	30	30	29	n.a
Total Asset Turnover	0.44	0.44	0.44	0.44	0.47	n.a
<b>Debt Ratios</b>						
Debt to Net Worth	0.00	0.00	44.62	8.68	3.21	n.a
Current Liab. to Liab.	0.25	0.26	0.27	0.28	0.29	n.a
<b>Liquidity Ratios</b>						
Net Working Capital	(\$101,439)	(\$44,664)	\$38,189	\$146,439	\$405,506	n.a
Interest Coverage	1.83	2.37	2.93	3.50	6.29	n.a
<b>Additional Ratios</b>						
Assets to Sales	2.30	2.26	2.25	2.29	2.12	n.a
Current Debt/Total Assets	28%	27%	26%	25%	22%	n.a
Acid Test	0.63	0.76	0.94	1.18	1.75	n.a
Sales/Net Worth	0.00	0.00	20.24	4.24	1.98	n.a
<b>Dividend Payout</b>	0.00	0.00	0.00	0.00	0.00	n.a

### **Long-Term Plan**

This business plan covers five years of activities and an initial expansion to 350 acres in cultivation and two distribution centers in Addis Ababa by Year Five. This initial farm plan is intended as a business experiment to see if the model of company ownership (versus direct land ownership) can enable former subsistence farmers to build equity and rise out of poverty. If Horn of Plenty's first farm is a success, we will exponentially scale-up our operations. With our current equipment and manpower we can farm up to 1000 acres. This would be the goal for Years Six through Ten. Expansion to a larger scale commercial farming operation will enable us to generate the kind of capital that would allow Horn of Plenty to begin a new farming venture in another area of Ethiopia. This would benefit more farmers, and raise more teff to improve food security in Ethiopia. Eventually we may diversify our products to include additional crops for domestic use and/or export.

## SUB-APPENDIX: BUSINESS PLAN TABLES

Table 12. Personnel Plan

Personnel Plan	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12
CEO (1)	\$850.00	\$850.00	\$850.00	\$850.00	\$850.00	\$850.00	\$850.00	\$850.00	\$850.00	\$850.00	\$850.00	\$850.00
Accountant(1)	\$350.00	\$350.00	\$350.00	\$350.00	\$350.00	\$350.00	\$350.00	\$350.00	\$350.00	\$350.00	\$350.00	\$350.00
Mill Foreman (1)	\$-	\$100.00	\$100.00	\$100.00	\$100.00	\$100.00	\$100.00	\$100.00	\$100.00	\$100.00	\$100.00	\$100.00
Mill workers (5)	\$-	\$-	\$-	\$375.00	\$375.00	\$375.00	\$375.00	\$375.00	\$375.00	\$375.00	\$375.00	\$375.00
Distribution Center Manager	\$-	\$100.00	\$100.00	\$100.00	\$100.00	\$100.00	\$100.00	\$100.00	\$100.00	\$100.00	\$100.00	\$100.00
Distribution Center Employee (4)	\$-	\$-	\$-	\$300.00	\$300.00	\$300.00	\$300.00	\$300.00	\$300.00	\$300.00	\$300.00	\$300.00
Truck Driver (2)	\$-	\$-	\$-	\$150.00	\$150.00	\$150.00	\$150.00	\$150.00	\$150.00	\$150.00	\$150.00	\$150.00
Farmer Associates (30)	\$3,000.00	\$3,000.00	\$3,000.00	\$3,000.00	\$3,000.00	\$3,000.00	\$3,000.00	\$3,000.00	\$3,000.00	\$3,000.00	\$3,000.00	\$3,000.00
Office assistant (2)	\$350.00	\$350.00	\$350.00	\$350.00	\$350.00	\$350.00	\$350.00	\$350.00	\$350.00	\$350.00	\$350.00	\$350.00
Maintenance worker (1)	\$75.00	\$75.00	\$75.00	\$75.00	\$75.00	\$75.00	\$75.00	\$75.00	\$75.00	\$75.00	\$75.00	\$75.00
Total People	23	23	23	23	23	23	23	23	23	23	23	23
<b>Total Payroll</b>	<b>\$4,625</b>	<b>\$4,825</b>	<b>\$4,825</b>	<b>\$5,650</b>	<b>\$5,650</b>	<b>\$5,650</b>	<b>\$5,650</b>	<b>\$5,650</b>	<b>\$5,650</b>	<b>\$5,650</b>	<b>\$5,650</b>	<b>\$5,650</b>

Table 13. Profit and Loss

	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12
<b>Sales</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$228,305</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$228,305</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$228,305</b>
Direct Cost of Sales	\$21,344	\$21,344	\$21,344	\$21,344	\$21,344	\$21,344	\$21,344	\$21,344	\$21,344	\$21,344	\$21,344	\$21,344
Other Costs of Sales	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Total Cost of Sales</b>	<b>\$21,344</b>	<b>\$21,344</b>	<b>\$21,344</b>	<b>\$21,344</b>	<b>\$21,344</b>	<b>\$21,344</b>	<b>\$21,344</b>	<b>\$21,344</b>	<b>\$21,344</b>	<b>\$21,344</b>	<b>\$21,344</b>	<b>\$21,344</b>
Gross Margin	(\$21,344)	(\$21,344)	(\$21,344)	\$206,961	(\$21,344)	(\$21,344)	(\$21,344)	\$206,961	(\$21,344)	(\$21,344)	(\$21,344)	\$206,961
Gross Margin %	0.00%	0.00%	0.00%	90.65%	0.00%	0.00%	0.00%	90.65%	0.00%	0.00%	0.00%	90.65%
<b>Expenses</b>												
Payroll	\$4,625	\$4,825	\$4,825	\$5,650	\$5,650	\$5,650	\$5,650	\$5,650	\$5,650	\$5,650	\$5,650	\$5,650
Marketing/Promotion	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000
Depreciation	\$1,828	\$1,828	\$1,828	\$1,828	\$1,828	\$1,828	\$1,828	\$1,828	\$1,828	\$1,828	\$1,828	\$1,828
Farm Land Lease	\$12,141	\$12,141	\$12,141	\$12,141	\$12,141	\$12,141	\$12,141	\$12,141	\$12,141	\$12,141	\$12,141	\$12,141
Distribution Center Lease	\$0	\$0	\$1,500	\$1,500	\$1,500	\$1,500	\$1,500	\$1,500	\$1,500	\$1,500	\$1,500	\$1,500
Mill Lease/Mortgage	\$0	\$0	\$170	\$170	\$170	\$170	\$170	\$170	\$170	\$170	\$170	\$170
Utilities	\$50	\$50	\$150	\$150	\$150	\$150	\$150	\$150	\$150	\$150	\$150	\$150
Insurance	\$1,500	\$1,500	\$1,500	\$1,500	\$1,500	\$1,500	\$1,500	\$1,500	\$1,500	\$1,500	\$1,500	\$1,500
Payroll Taxes	\$694	\$724	\$724	\$848	\$848	\$848	\$848	\$848	\$848	\$848	\$848	\$848
Charitable Donations	\$571	\$571	\$571	\$571	\$571	\$571	\$571	\$571	\$571	\$571	\$571	\$571
<b>Total Operating Expenses</b>	<b>\$23,409</b>	<b>\$23,639</b>	<b>\$25,409</b>	<b>\$26,358</b>	<b>\$26,358</b>	<b>\$26,358</b>	<b>\$26,358</b>	<b>\$26,358</b>	<b>\$26,358</b>	<b>\$26,358</b>	<b>\$26,358</b>	<b>\$26,358</b>
Profit Before Interest and Taxes	(\$44,753)	(\$44,983)	(\$46,753)	\$180,604	(\$47,702)	(\$47,702)	(\$47,702)	\$180,604	(\$47,702)	(\$47,702)	(\$47,702)	\$180,604
EBITDA	(\$42,925)	(\$43,155)	(\$44,925)	\$182,432	(\$45,874)	(\$45,874)	(\$45,874)	\$182,432	(\$45,874)	(\$45,874)	(\$45,874)	\$182,432
Interest Expense	\$5,417	\$5,417	\$5,417	\$5,417	\$5,417	\$5,417	\$5,417	\$5,417	\$5,417	\$5,417	\$5,417	\$5,417
Taxes Incurred	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Net Profit</b>	<b>(\$50,169)</b>	<b>(\$50,399)</b>	<b>(\$52,169)</b>	<b>\$175,187</b>	<b>(\$53,118)</b>	<b>(\$53,118)</b>	<b>(\$53,118)</b>	<b>\$175,187</b>	<b>(\$53,118)</b>	<b>(\$53,118)</b>	<b>(\$53,118)</b>	<b>\$175,187</b>
<b>Net Profit/Sales</b>	<b>0.00%</b>	<b>0.00%</b>	<b>0.00%</b>	<b>76.73%</b>	<b>0.00%</b>	<b>0.00%</b>	<b>0.00%</b>	<b>76.73%</b>	<b>0.00%</b>	<b>0.00%</b>	<b>0.00%</b>	<b>76.73%</b>

Table 14. Cash Flow

Cash Received		Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12
<b>Cash from Operations</b>													
Cash Sales		\$0	\$0	\$0	\$228,305	\$0	\$0	\$0	\$228,305	\$0	\$0	\$0	\$228,305
<b>Subtotal Cash from Operations</b>		<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$228,305</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$228,305</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$228,305</b>
<b>Additional Cash Received</b>													
Sales Tax, VAT, HST/GST Received	15 %	\$0	\$0	\$0	\$34,246	\$0	\$0	\$0	\$34,246	\$0	\$0	\$0	\$34,246
New Current Borrowing		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
New Other Liabilities (interest-free)		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
New Long-term Liabilities		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Sales of Other Current Assets		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Sales of Long-term Assets		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
New Investment Received		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Subtotal Cash Received</b>		<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$262,551</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$262,551</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$262,551</b>



Table 14. Cash Flow Continued

Expenditures	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12
<b>Expenditures from Operations</b>												
Cash Spending	\$4,625	\$4,825	\$4,825	\$5,650	\$5,650	\$5,650	\$5,650	\$5,650	\$5,650	\$5,650	\$5,650	\$5,650
Bill Payments	\$3,592	\$105,615	\$43,805	\$45,521	\$45,640	\$45,640	\$45,640	\$45,640	\$45,640	\$45,640	\$45,640	\$45,640
<b>Subtotal Spent on Operations</b>	<b>\$8,217</b>	<b>\$110,440</b>	<b>\$48,630</b>	<b>\$51,171</b>	<b>\$51,290</b>	<b>\$51,290</b>	<b>\$51,290</b>	<b>\$51,290</b>	<b>\$51,290</b>	<b>\$51,290</b>	<b>\$51,290</b>	<b>\$51,290</b>
<b>Additional Cash Spent</b>												
Sales Tax, VAT, HST/GST Paid Out	\$0	\$0	\$0	\$34,246	\$0	\$0	\$0	\$34,246	\$0	\$0	\$0	\$34,246
Principal Repayment of Current Borrowing	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Other Liabilities	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Principal Repayment Long-term Liabilities	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Principal Repayment Purchase Other Current Assets	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Purchase Long-term Assets	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Dividends	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Subtotal Cash Spent</b>	<b>\$8,217</b>	<b>\$110,440</b>	<b>\$48,630</b>	<b>\$85,416</b>	<b>\$51,290</b>	<b>\$51,290</b>	<b>\$51,290</b>	<b>\$85,536</b>	<b>\$51,290</b>	<b>\$51,290</b>	<b>\$51,290</b>	<b>\$85,536</b>
Net Cash Flow	(\$8,217)	(\$110,440)	(\$48,630)	\$177,134	(\$51,290)	(\$51,290)	(\$51,290)	\$177,015	(\$51,290)	(\$51,290)	(\$51,290)	\$177,015
<b>Cash Balance</b>	<b>\$188,929</b>	<b>\$78,489</b>	<b>\$29,859</b>	<b>\$206,993</b>	<b>\$155,703</b>	<b>\$104,413</b>	<b>\$53,123</b>	<b>\$230,138</b>	<b>\$178,848</b>	<b>\$127,557</b>	<b>\$76,267</b>	<b>\$253,282</b>

Table 15. Balance Sheet

		Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12
Assets	Starting Balances												
Current Assets													
Cash	\$197,146	\$188,929	\$78,489	\$29,859	\$206,993	\$155,703	\$104,413	\$53,123	\$230,138	\$178,848	\$127,557	\$76,267	\$253,282
Inventory	\$0	\$64,032	\$64,032	\$64,032	\$64,032	\$64,032	\$64,032	\$64,032	\$64,032	\$64,032	\$64,032	\$64,032	\$64,032
Other Current Assets	\$25,366	\$25,366	\$25,366	\$25,366	\$25,366	\$25,366	\$25,366	\$25,366	\$25,366	\$25,366	\$25,366	\$25,366	\$25,366
Total Current Assets	\$222,512	\$278,327	\$167,887	\$119,257	\$296,391	\$245,101	\$193,811	\$142,521	\$319,536	\$268,246	\$216,955	\$165,665	\$342,680
Long-term Assets													
Long-term Assets	\$1,253,740	\$1,253,740	\$1,253,740	\$1,253,740	\$1,253,740	\$1,253,740	\$1,253,740	\$1,253,740	\$1,253,740	\$1,253,740	\$1,253,740	\$1,253,740	\$1,253,740
Accumulated Depreciation	\$0	\$1,828	\$3,656	\$5,484	\$7,312	\$9,140	\$10,968	\$12,796	\$14,624	\$16,452	\$18,280	\$20,108	\$21,936
Total Long-term Assets	\$1,253,740	\$1,251,912	\$1,250,084	\$1,248,256	\$1,246,428	\$1,244,600	\$1,242,772	\$1,240,944	\$1,239,116	\$1,237,288	\$1,235,460	\$1,233,632	\$1,231,804
Total Assets	\$1,476,252	\$1,530,239	\$1,417,971	\$1,367,513	\$1,542,819	\$1,489,701	\$1,436,583	\$1,383,465	\$1,558,652	\$1,505,534	\$1,452,415	\$1,399,297	\$1,574,484
Liabilities and Capital		Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12
Current Liabilities													
Accounts Payable	\$0	\$104,157	\$42,288	\$43,999	\$44,119	\$44,119	\$44,119	\$44,119	\$44,119	\$44,119	\$44,119	\$44,119	\$44,119
Current Borrowing	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Other Current Liabilities	\$400,000	\$400,000	\$400,000	\$400,000	\$400,000	\$400,000	\$400,000	\$400,000	\$400,000	\$400,000	\$400,000	\$400,000	\$400,000
Subtotal Current Liabilities	\$400,000	\$504,157	\$442,288	\$443,999	\$444,119	\$444,119	\$444,119	\$444,119	\$444,119	\$444,119	\$444,119	\$444,119	\$444,119
Long-term Liabilities	\$1,300,000	\$1,300,000	\$1,300,000	\$1,300,000	\$1,300,000	\$1,300,000	\$1,300,000	\$1,300,000	\$1,300,000	\$1,300,000	\$1,300,000	\$1,300,000	\$1,300,000
Total Liabilities	\$1,700,000	\$1,804,157	\$1,742,288	\$1,743,999	\$1,744,119	\$1,744,119	\$1,744,119	\$1,744,119	\$1,744,119	\$1,744,119	\$1,744,119	\$1,744,119	\$1,744,119
Paid-in Capital	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Retained Earnings	(\$223,748)	(\$223,748)	(\$223,748)	(\$223,748)	(\$223,748)	(\$223,748)	(\$223,748)	(\$223,748)	(\$223,748)	(\$223,748)	(\$223,748)	(\$223,748)	(\$223,748)
Earnings	\$0	(\$50,169)	(\$100,569)	(\$152,738)	\$22,449	(\$30,670)	(\$83,788)	(\$136,906)	\$38,281	(\$14,837)	(\$67,955)	(\$121,074)	\$54,113
Total Capital	(\$223,748)	(\$273,917)	(\$324,317)	(\$376,486)	(\$201,299)	(\$254,418)	(\$307,536)	(\$360,654)	(\$185,467)	(\$238,585)	(\$291,703)	(\$344,822)	(\$169,635)
Total Liabilities and Capital	\$1,476,252	\$1,530,239	\$1,417,971	\$1,367,513	\$1,542,819	\$1,489,701	\$1,436,583	\$1,383,465	\$1,558,652	\$1,505,534	\$1,452,415	\$1,399,297	\$1,574,484
Net Worth	(\$223,748)	(\$273,917)	(\$324,317)	(\$376,486)	(\$201,299)	(\$254,418)	(\$307,536)	(\$360,654)	(\$185,467)	(\$238,585)	(\$291,703)	(\$344,822)	(\$169,635)

**APPENDIX C**  
**SUPPORTING DATA**

Table 16.Startup Requirements

<b>Startup Expenses</b>	
Residence Permit	\$ 600.00
Permit fees	100.00
Consultant fee	600.00
Office space rent	250.00
<b>Total</b>	<b>\$1,550.00</b>
<b>Office Supplies</b>	
Brother MFC-9460CDN	\$600.00
High-Performance Color Laser All-in-One for Small Business Printer	
(6) Brother MFC-9460 Toner Ink Cartridge	310.00
Office supplies: paper, pens, etc.	360.00
(2) Cisco Small Business SPA 504G	200.00
VoIP phone - Silver, dark gray	
Office furniture: chairs, desks, cabinets, shelving	1,500.00
2 Cash Registers	432.00
Logo Design	2,000.00
Advertising/week	1,000.00
Stationery etc.	500.00
Miscellaneous	1,000.00
Digital Camera: Canon EOS Rebel	700.00
T3i Digital SLR Camera with Canon EF-S 18-55mm IS II lens	
Digital Camera Accessories	200.00
Accounting Software, QuickBooks Pro Quicken	250.00
Credit Card Software, PCCharge Pro Go Software	299.00
Retail Management Software, POS & Inventory Management Celerant ARMS	5,371.00
Computer (4 desktop)	6,000.00
Computer (2 Laptop)	4,644.00
<b>Total</b>	<b>\$ 25,366.00</b>

Table 16. Startup Requirements Continued

<b>Employee Expenses</b>	<b>Per Month</b>
CEO	\$5,000.00
CFO	350.00
1 Bookeeper/Secretary	175.00
11 Full time employee	770.00
1 Truck Driver	75.00
30 Cooperative farm associates	2,400.00
<b>Total Employee Expenses</b>	<b>\$8,770.00</b>
<b>Equipment Required</b>	
5 Used Farm Tractors	\$500,000
2 Used Combine Harvester	300,000
1 Used Seeder/Planter	80,000
Used Harrow, 22in Disk, 9ft Cutting Width	25,000
Used Field Cultivators	28,000
Used Disc Plows/Rippers	15,000
Used Mulch Finishers	7,000
5 Used Pickup Trucks	150,000
<b>Total Equipment</b>	<b>\$1,105,000</b>
<b>Total Startup Cost</b>	<b>\$ 1,140,686</b>
<b>Shipping Costs (US to Ethiopia)</b>	
5 Used Farm Tractors	\$10,000
2 Used Combine Harvester	3,000
1 Used Seeder/Planter	1,500
Used Harrow, 22in Disk, 9ft Cutting Width	1,500
Used Field Cultivators	1,500
Used Disc Plows/Rippers	1,500
Used Mulch Finishers	1,500
5 Used Pickup Trucks	10,000
Office supplies	1,000
Irrigation Equipment	15,000
<b>Total Cost of Shipping</b>	<b>\$46,500</b>

Table 17. Equipment Cost Estimate

Equipment List	Quantity	Size	Distance (ft)	Price	Total Cost
Pump	1				62,000
6" aluminum pipe	121	30 ft	3614.97	40.00	144,599
Sprinkler heads and connectors					30,000
8" PVC Pipe Schedule 80	84	6" X 12 ft	1000	20	1,680
3" Vinyl Layflat Water Pump Discharge Hose 300' Blue	25			220.00	5,500
Model 48-4 SSK Stainless Steel	4			12,000.00	50,000
Sand Media Filtration					
Miscellaneous					128,348
Well Drilling					10,233
Labor Cost					5,600.00
<b>Total</b>					<b>\$437,959.80</b>
Total Asset at startup					\$286,598.80
Total Expense for startup					\$151,361.00

Table 18. Cost of Production

Grain Mill Operation	Cost/Month		
Building lease	\$2,040.00		
Utilities	\$1,200.00		
Gasoline	1000 gallons	\$3,720.00	
Material and supplies		\$ 200.00	
Bags		\$160.00	\$45.40 Price for additional 50 acres of teff production
Total Grain Mill Operation Cost/Month		\$7,320.00	\$7365.40

Table 18. Cost of Production Continued

Product List	Price of Seed/1 Kg	Acres	Total Seed needed in Kg	Cost for 1st. Season	Cost for 2nd Season	Cost/Year
White Teff	\$0.90	150	680	\$ 612.35	\$0	
Brown Teff	\$0.78	150	680	\$ 530.70		
Farm Land rent/acre/year	\$50	300		\$ 5,000.00	\$ 5,000.00	\$15,000
Land Preparation (per acre)	\$35.00	300		\$10,500.00	\$ 10,500.00	
Irrigation/acre	\$20.00	300		\$ 6,000.00	\$ 6,000.00	
Fertilization/acre	\$36.00	300		\$10,800.00	\$ 10,800.00	
Pest Management/acre	\$13.50	300		\$ 4,050.00	\$ 4,050.00	
Harvest/acre	\$40.00	300		\$12,000.00	\$ 12,000.00	
Labor/acre	\$60.00	300		\$18,000.00	\$ 18,000.00	
Utilities/acre/Season	\$2.40	300		\$ 720.00	\$ 720.00	
<b>Subtotal for Farming Cost/Season</b>				<b>\$68,213.05</b>	<b>\$ 62,070.00</b>	
			<b>Per teff grade</b>	<b>\$34,106.53</b>	<b>\$ 31,035.00</b>	
			<b>Cost/Month/Teff</b>	<b>\$ 8,526.63</b>	<b>\$ 7,758.75</b>	
Year One cost of planting	( \$ 8,526.63*2*12)	=		\$204,639.16		
Total cost of planting/year	(( \$ 62,070.00*2)+( \$68,213.05))	=		\$192,353.05		
Total cost of planting/grade/year	(\$192,353.05/2)	=		\$96,176.53		

1 kilogram = 2.20 pounds

Amount of seed needed = 10/pound/acre (10 lb/1AC\*1Kg/2.2 lb) = 4.55 Kg/AC seed needed/acre

Table 18. Cost of Production continued

Distribution Center and Central Office			Cost/Month	
Lease 1 distribution center			18,000.00	
Utilities			4,000.00	
Tractor and car Maintenance			150.00	
Office Supplies			60	
Farm land lease	Hectare	121.405	12,140.50	
		20		
<b>Total expense</b>			34,350.50	
<b>Total Mill, Distribution Center &amp; Central Office Cost/Month</b>			<b>\$ 41,670.50</b>	
			8,215.25	Distribution costs added to each kind of teff grade/month
			8,526.63	Cost of production/month/teff
			\$16,741.88	Total Cost of Production/teff/month
			\$33,483.76	Total Cost of Production/month
			\$133,935.05	Cost of Production/Season
			<b>\$401,805.16</b>	<b>Total Cost of Production/Year</b>
			<b>Per Month</b>	<b>Per Season</b>
<b>Cost of Production/kg</b>			\$ 0.12	\$ 1.49
				<b>Per Year</b>
				\$1.48



Table 19. Personnel Cost/Month

	<b>Number</b>	<b>Salary/Month</b>	<b>Monthly Total</b>	<b>Yearly Total</b>
CEO	1	\$5000	\$5,000.00	\$60,000.00
Accountant	1	350	350.00	4200.00
Mill Foreman	1	100	100.00	1200.00
Mill workers	5	75	375.00	4500.00
Distribution Center Employee	5	75	375.00	4500.00
Truck Driver	2	75	150.00	1800.00
Farmer Associates	30	100	3,000.00	36000.00
Office assistant	2	175	350.00	4200.00
Maintenance worker	1	75	75.00	900.00
<b>Total Personnel Expense/Month</b>	<b>53</b>		<b>\$ 9,775.00</b>	<b>\$117,300.00</b>