Appendices

UST Business Team Report

Visit January 2010

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Appendix 1 – Potato Diseases

Galle verruqueuse

Potato wart disease

Mildiou

Late Blight

Fusariose

Dry Rot

Gangrène

Gangrene

Pythiales

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Rhizoctonia Black scurf (on tuber)/ Stem canker (on the plant)

Gale argentée

Silver Scurf

Dartrose

Black Dot

Oosporiose

Skin Spot

Alternariose

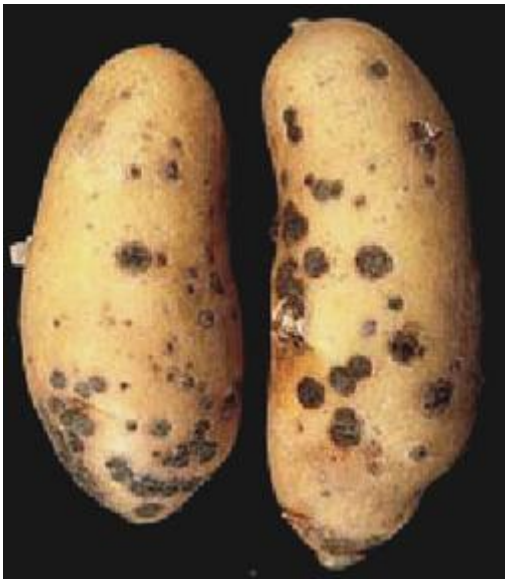
Early Blight

Sclerotiniose

White Mold

Gale poudreuse

Powdery Scab



Verticillium wilt

Verticilliose

Virose grave

Severe mosaic

Virose légère

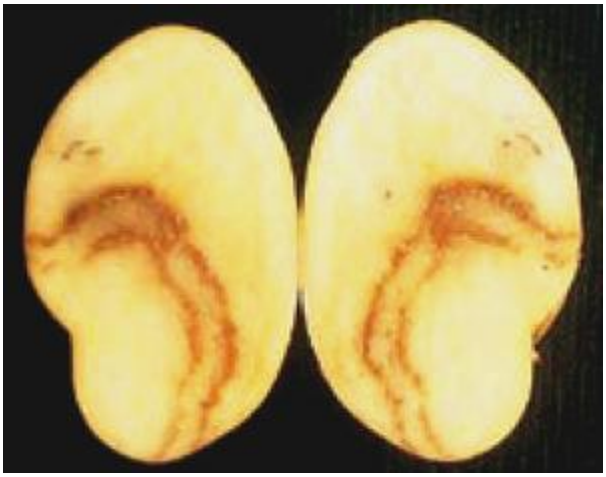
Mild mosaic

Enroulement

Leafroll

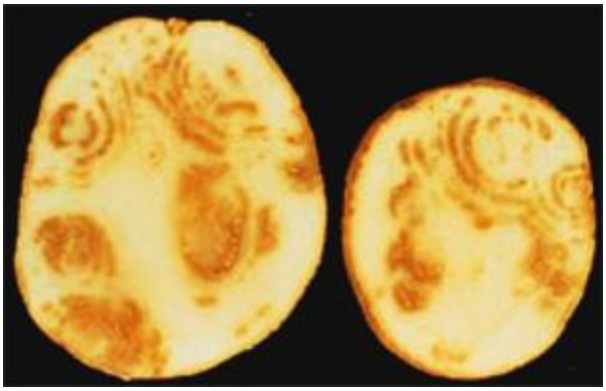
Moptop

Moptop



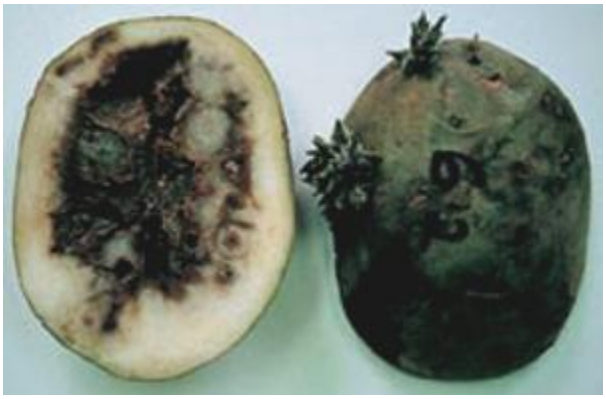
Rattle

Tobacco Rattle Virus



TSWV

Tomato Spotted Wilt Virus



Jambe noire

Blackleg




Flétrissement bactérien, pourriture annulaire

Ring rot

Pourriture brune

Brown rot

Gale commune

Common scab

Gale plate

Netted scab

Viroïde des tubercules en fuseau

Potato spindle tuber viroid

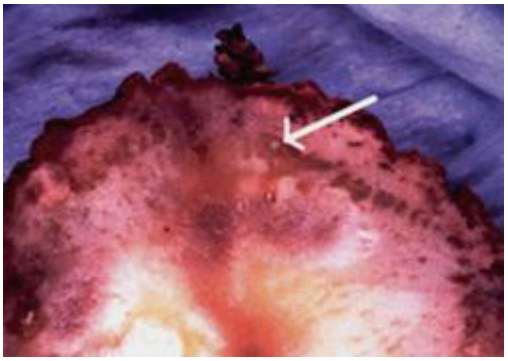
Stolbur

Nématodes à kystes

Cyst nematodes

Nématodes à galle

Root knot nematodes




Nématodes libres

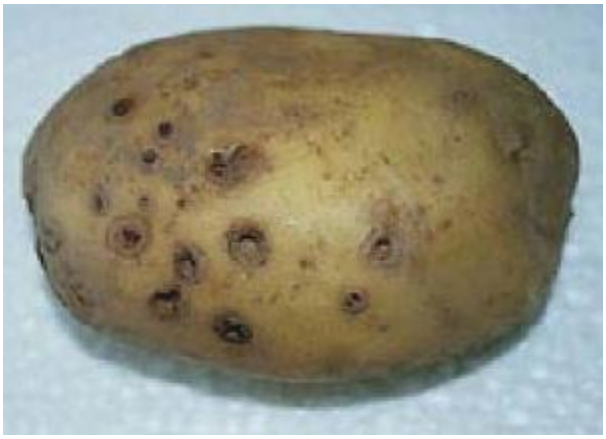
Potato rot nematode

Doryphore

Colorado Bettle

Taupin

Wireworms/ slugs



Teigne

Tuber moth

Appendix 2 - Fiche de Suivi or pour Inspection

Semaine	Date	Maladie	Insecte	Autres
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
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14				
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23				
24				

Appendix 3 - Les bonnes pratiques en production de semences

1. Le choix des champs:
2. Loin des champs de tomate, tabac, ou aubergine, piment, poivron etc…
3. Loin des champs de pomme de terre de consommation.
4. Eviter les eaux de surface.
5. Ne pas utiliser les outils de travail dans d'autres champs et nettoyer à l'eau javellisée (1 cuillère a soupe dans 10 litres d'eau) 1 fois par semaine.
6. Nettoyer vos chaussures à l'eau javelisées quand vous entrez le champ.
7. Observer les rotations régulièrement chaque année ave mais, haricot, mil, manioc, oignion, ail etc...
8. Ne pas blesser les tubercules au moment de la récolte.
9. Laissez les pommes de terre renforcr leur peaux après récolte.
10. Enlever les mauvaises herbes dans le champs et autour.
11. Utiliser du compost bien décomposé.
12. Respecter les mesures de quarantaine.

Appendix 4 – Printout from Business Plan Pro Software

Mali Agribusiness Center (MABC)

1 Vision Statement:

The Mali Agribusiness Center will elevate the quality of life of Malians through exploration, innovation, and application of research results for agricultural and business development.

2 Mission Statement

The Mali Agribusiness Center

- **Identifies and develops sustainable methodology for initiatives that benefit the Malian community**
- **Facilitates the transfer of knowledge to ensure high quality and marketable products and services, and**
- **Acts as a catalyst in developing holistic domestic and global initiatives.**

3 Values

The Agribusiness Center values:

- Farmer first
- Innovation through science based research and feedback
- Social responsibility
- Dissemination of information
- Hard work and having fun

4 Initial Efforts

In 2005, the United States Agency for International Development (USAID) funded a grant through the Association Liaison Office (ALO), now Higher Education for Development (HED), to train seven Malian scientists in the US (four from Institut d'Economie Rurale : IER) and (three from Institut Polytechnique Rural de Formation et de Recherche Appliquée : IPR/IFRA).

The training covers specialized subjects such as Biotechnology, Engineering, Agricultural Education and Business Communication. The American Universities partners under this grant are Montana State University (MSU) in Bozeman and the University of Saint Thomas (UST) in Minneapolis-St. Paul (Minnesota).

At the end of their participants training, IER and IPR/IFRA decided collaboratively to create the **"Mali Agribusiness Center",** which was launched in 2007.
This project was born of multiple community partners and students from many disciplines (entomology, soil science, plant pathology, veterinary and molecular biology, extension and agricultural education, French language and literature, media and theater arts, natural history film-making, journalism, communications, agricultural economics, business accounting, finance, information systems, mechanical engineering, hydraulic engineering, environmental engineering, crop science, sociology, Native American Studies) at different institutions.

Logistics and Technology used to facilitate across campus discussions and Intern/Extern Research

- Partners have used Skype technology to communicate face-to-face, electronically, with overseas mentors and student teams are introduced at each higher education institution for faculty and student interchanges in the extern program and for faculty exchanges in the across-campus discussions.
- Short-term visits of Malian scientists, professors particularly those leading the Mali Agribusiness Center and related scientists, educators (such as, the IER plant disease scientist, biotechnology lab director), have provided assistance in the classroom discussions as well as in pre-departure planning with externs and faculty.
- Video conferencing is also used to share plans and results in the extern program and for linking the across-campus discussions within the US and with Mali.

One of the main students and faculty participation includes the Graduate students in Project Management led by Dr. Owens. As a matter of fact, in Spring and Fall 2008, Dr. Owens graduate students did conduct intensive investigation respectively in Shea and Seed Potatoes.

- In spring 2008 the class was split into five teams to work on Shea: **Production, Distribution, Quality Control, Governance and Marketing**

- In Fall 2008 another class was split into five teams to work on seed potato: **Transportation, Quality Control, Storage, Governance and Marketing.**

- In Spring 2009 four graduating MBA students were selected by Dr. Owens to come with him to Mali along with other students and faculty from UST and Virginia Tech to help draft the Business Plans for the four Initiatives selected by the Agribusiness Center team members.

Dr. Camille George's work includes the Evaporative Cooler which is being prototyped at ENI (Ecole Nationale d'Ingénieurs) for reproduction. Her work includes also the Shea Butter Mixer which still needs improvement.

Students from Sociology guided by Dr. Smith-Cunnien and Language lead by Dr. Shams have also been involved in the 2009 Mali trip. Drs. Saly, Owens, Sham, and Smith-Cunnien have worked on strategies to

integrate cross discipline knowledge at UST. Dr. Owens has consulted with the MABC to generate the strategic business plans.

Faculty and students from Virginia Tech also joined the 2009 trip to help on the Honey and Bees Wax Initiative.

The above shows how Cross University action research can be achieved to synergize efforts for development purposes.

5 Objectives of Management Team

The team has identified four current areas in which the MABC wishes to be involved:

5.1 Shea Butter Initiative

An opportunity exists for Malian Shea butter producers to create strategic export partnerships with cosmetic companies that use Shea butter in their products. One of the key requirements that need to be satisfied in order to capitalize on this opportunity is to improve the quality of Shea butter produced in Mali. The Agribusiness Center will work with the Shea cooperatives in Mali to improve quality by identifying best practices and disseminating this information to Shea producers. The Center will also market and distribute kits to test the acidity and rancidity of Shea butter as well as act as an organization that certifies different grades of Shea butter produced in Mali. Finally the Agribusiness Center will work to connect Shea cooperatives with strategic export partners that are willing to pay competitive prices for Mali Shea butter.

The competitive advantage for Mali Shea producers comes from the fact that Mali has the largest untapped Shea parkland in the sub-region. At present only a small percent of Shea nuts are being harvested. Of this 90% of Shea butter produced is being consumed locally and the excess is exported. Increasing the harvest of Shea nuts, could potentially all lead to increased Shea butter exports. Shea butter has a higher profit margin compared to Shea nuts provided quality standards are met.

The Mali Agribusiness Center has the advantage of having the network of various NGOs involved in improving Shea production in Mali. The Center also has partnerships with institutions like the University of St. Thomas and Montana State University to utilize the communication infrastructure and analyze the US and European markets. This allows to better position the Mali Shea producers to tap into untapped markets in the US and Europe.

5.2 Seed Potatoes Initiative

Currently Mali imports over two billion CFA worth of seed potatoes from Europe each year. Mali, as a country does not grow its own seed potatoes. The Mali Agribusiness Center's seed potato initiative creates a tremendous opportunity to eliminate the need for seed potato imports while creating an economic engine for Malian farmers.

The vision of the Mali Agribusiness Center to grow, test, certify, market, and sell quality seed potato tubers to Malian farmers. The Center will sell for profit quality seed potato tubers to Malian farmers who will in turn grow the tubers into seed potatoes. The Malian seed potato farmers will then sell the quality seed potatoes to market prior to the growing season of November to December.

Often, foreign seed potatoes arrive late to market and are of low quality. The strategy will be to market and sell seed potatoes prior to arrival of foreign seed potatoes (foreign imports typically arrive in late October to early November). Moreover, the Center will market its seed potatoes being of high quality and higher yield.

The Mali Agribusiness Center will grow, test, certify, market, and sell quality seed potato tubers to Malian farmers. In addition, the Center will provide storage and cooling as well as a distribution network for seed potatoes. Seed potato tubers will be grown and distributed to farmers in Borko (14.971320,-3.359413) and the surrounding area. This location provides optimal growing conditions with disease free soil and favorable temperatures. The center will also provide storage and cooling to extend dormancy of the seed potato. This facility will also be strategically located in the Borko region. The Center will also provide transportation logistics from the seed potato growing region to the area of Sikasso where 80 percent of the table potatoes are grown in Mali. Transportation requirements are that seed potatoes must not be damaged during shipment. Moreover, the shipment container must be in sterile condition to prevent contamination of the seed potatoes. Finally, the Center will provide marketing and education services to aid in the promotion of Malian seed potatoes. Marketing deliverables will include such items as brochures, certification

5.3 Honey and Bees wax Initiative

The business opportunity that the Agribusiness Center faces with the honey and beeswax initiative is being able to be a key influencer in an undeveloped resource for Mali. Honey and beeswax in Mali is considered by most to be a supplemental income generator for farmers. The need for honey and beeswax is strong not only in the local market but worldwide. By entering into the market, the Agribusiness Center will be able to exert influence over standards and can quickly control the market share of honey producers.

The overall vision of the Agribusiness Center honey and beeswax initiative is to build up the Mali farmers into cooperatives (or business units) that can pool resources to help aid in the production of honey and beeswax. The Agribusiness Center would provide training to ensure that best practices were implemented, thus resulting in higher quality honey and beeswax. The honey and beeswax in its basic raw form would then be purchased by the Agribusiness Center from the farmers. The honey and beeswax would then be processed, tested, and packaged at a storage facility in Bamako and sold to a worldwide distributor.

The key strategy for implementation is based upon an adaptable education system to the Mali farmers. Through its unique makeup, the Agribusiness Center is capable of researching best practices for honey and beeswax production. The dissemination of this information to the farmers allows the farmers to be

competitive on a global scale with minimal cost. Furthermore, it allows the training to be adaptable to the market's needs.

5.4 Evaporative Cooler Initiative

The Mali Agribusiness Center will be prepared to launch the evaporative cooling system by 2010. This system will use nearly half the amount of energy as a traditional air conditioning system. This first-generation system will be a viable solution for urban Mali and areas connected to a power grid. The Mali Agribusiness Center will continue to partner with local engineering schools to further develop the system in order to create an application that uses no electricity from a power grid.

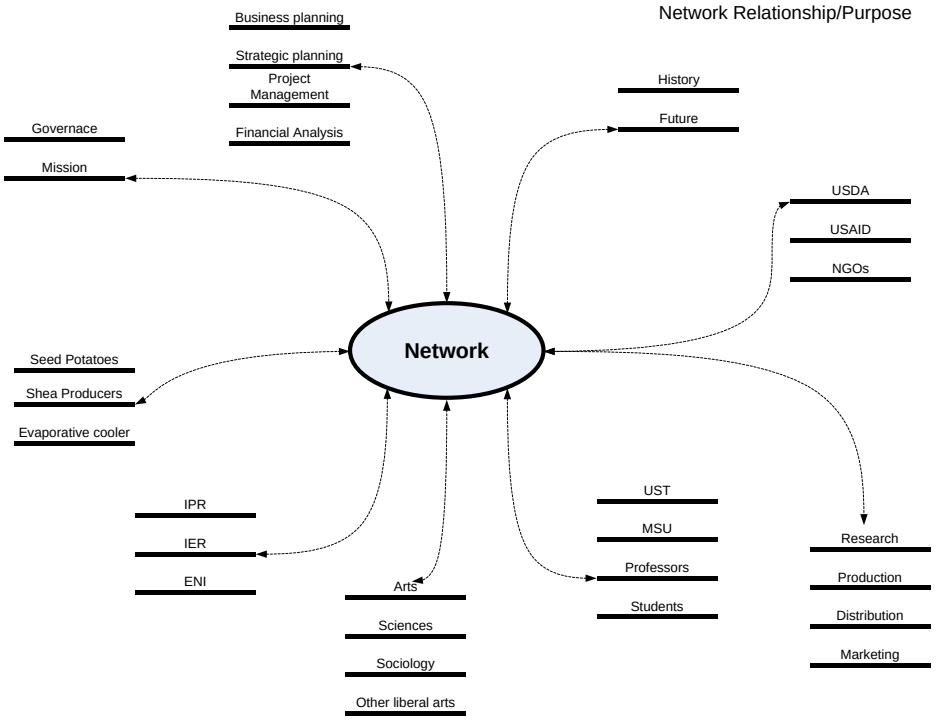
The Agribusiness Center will employ a push marketing strategy that utilizes existing retail channels for air conditioning systems. The evaporative cooler business unit will operate as a for-profit unit. Revenue from the evaporative cooling initiative will help sustain the Agribusiness Center through the initiation phase of several strategic initiatives.

Several years of partnership that has existed between Montana State University-Bozeman, University of St-Thomas, Virginia Tech, University of California-Riverside, IPR, IER, and ENI enabled to bring expertise to the Mali Agribusiness Center as well for the following purposes: .

- Collect and disseminate biotechnologies research-based packages to current and prospective agribusiness entrepreneurs
- Act as an interface between:
  - Public sector (Governmental structures at national, regional and local levels)
  - Private sector (Financial Institutions, NGO, Individuals, etc.)
  - Clientèle (Farmers, Agribusiness Entrepreneurs, etc.)
- Develop educational and training programs for agribusiness entrepreneurs
- Provide technical assistance to agribusiness entrepreneurs

Manufacture and commercialize appropriate farm tools for agribusiness entrepreneurs [1]

6 Other Key Stakeholders



7 Financial Plan

Tentative Budget
Mali Agribusiness Center (MABC)
(On the basis of 18 months)

Offices for MABC Members			
	Number	**Cost per unit**	**Total Cost (In FCFA)**
Initial investment			
Space provided by home Institutions (renovation)	4	-	**5000.000**
Desks (7 members + 1 secretary)	8	**200.000**	**1.600.000**
Chairs 3 per desk	24	**60.000**	**1.440.000**
File cabinets (1 per office)	4	**175.000**	**700.000**
Computers (8)	8	**1.300.000**	**10.400.000**
Scanner	1	**400.000**	**400.000**
Multimedia projector and accessories	1	**950.000**	**950.000**
Printer/fax/copier	1	**600.000**	**600.000**
Refrigerator	1	**400.000**	**400.000**
Operating costs			
Internet connection	1	**600.000**	**600.000**
Phone/Communication	1(line)	**2.750.000**	**2.750.000**
Website	1	**400.000**	**400.000**
Secretary	1	**60.000**	**1.080.000**
Accounting	1	**70.000**	**1.260.000**
Supplies paper, ink, pens	-	**-**	**3.000.000**
Marketing of MABC	-	**-**	**2.000.000**
Shea Butter/Honey and Bees Wax			
Travel costs per trip			
Transporation/gas		**400.000**	
Meals		**75.000**	
Lodging		**200.000**	
Maintenance/repairs		**30.000**	
Miscellaneous		**-**	
Total cost per trip		**705.000**	

15 trips			**10.575.000**
Seed Potato			
Travel needed			
Number of trips	6	**705.000**	**4.239.000**
Exchanges with American Universities (UST, MSU, VTech)	-	**-**	**15.000.000**
Total	**-**	**-**	**62.394.000**
Miscellaneous (5 %)		**-**	**3.119.700**
TOTAL			**65.513.700**

A1 . The Financing Request - Shea

Funding in the Shea butter initiative will cover equipment (women Cooperatives and Associations) for Shea Butter quality production, Shea butter procurement and shipment for sale to the sub region as well as to USA, Canada and Europe.

Funding will cover Shea butter storage facilities and Shea butter test kits procurement.

A2 . The Financing Request – Seed Potato

In order to initialize, execute, and sustain a viable seed potato value chain, financing is required for the Mali Agribusiness Center. Funding will support venture startup costs with the objective that the seed potato initiative will be self-supporting after revenue is generative through the first growing cycle of seed potato tubers.

That majority of the financing request will be directed at storage and cooling facility in the Borko region. As previously stated, G0 seed potatoes must be stored at four degrees Celsius for up to eight months in order to extend the dormancy period. To extend the dormancy period of seed potatoes results in higher quality seed potatoes and thus higher yields.

In order to create a sustainable and successful seed potato value chain, it is imperative to have a quality storage facility located in the Borko region and critical that the seed potatoes be stored at an optimal temperature.

The remaining funding will support laboratory renovations, chemical supplies and tools, transportation services and logistics, and marketing and governance costs.

Seed Potato Cost Breakdown

Quality				
Item No.	Description	Quantity	Unit Cost	Total
1.00	Storage: Greenhouse (Nuclear Seed Potato Tubers)	1	5,000,000	10,000,000
2.00	Storage: Cooling Storage (Evaporative Cooling)	1	2,000,000	2,000,000
3.00	Disease Laboratory Renovations and Infrastructure	1	2,000,000	2,000,000
4.00	Tissue Laboratory Renovations and Infrastructure	1	2,000,000	2,000,000
5.00	Chemical Supplies	1	1,000,000	1,000,000
6.00	Laboratory tools and materials	1	2,000,000	2,000,000
7.00	Equipment	1	1,000,000	1,000,000
			Total:	20,000,000

Storage				
Item No.	Description	Quantity	Unit Cost	Total
1.00	Storage Construction (Materials & Labor)	1	20,000,000	20,000,000
2.00	Storage Maintenance (Sanitizing & Disease Prevention)	1	1,000,000	1,000,000
3.00	Storage Cooling Unit (Solar Cooling)	1	25,000,000	25,000,000
4.00	Storage Cooling Utilities	1	250,000	250,000
			Total:	46,250,000

Transport				
Item No.	Description	Quantity	Unit Cost	Total
1.00	Transportation Delivery: Storage to Borko	1	1,000,000	5,000,000
2.00	Transportation Cleaning and Sanitation Labor	1	750,000	750,000
3.00	Transportation Cleaning and Sanitation Chemicals	1	1,000,000	1,000,000
4.00	Transportation Logistics for Seed Potato Farmers (Borko to Sikasso)	1	1,000,000	2,000,000
			Total:	8,750,000

Marketing				
Item No.	Description	Quantity	Unit Cost	Total
1.00	Seed Potato Marketing Materials	1	5,000,000	5,000,000
2.00	Seed Certification Materials	1	5,000,000	5,000,000
3.00	Education (Seed Potato Farmers and IPR Students	1	2,500,000	2,500,000
			Total:	12,500,000

Governance				
Item No.	Description	Quantity	Unit Cost	Total
1.00	Administrative Governance and Compliance Assurance	1	5,000,000	5,000,000
			Total:	5,000,000

2.00	Labor (lab, tunnels, field)		12.000.000
3.00	Travel-missions (15 trips of 5 persons in three years)		9.000.000
4.00	Perdiem		8.000.000
5.00	Drilling (in Borko)		7.000.000
		Funding Needed:	**128.,500,000**

A3. The Financing Request – Honey and Beeswax

The strategic plan for the Agribusiness Center requires two separate infusions of funding.

The first request is through a grant agency (such as USAID) to provide the necessary initial equipment and training for the Agribusiness Center's storage facility. Specifically the request is for 51,150,000 CFA (roughly $110,000 USD). This cash flow will fund the purchase of 10 honey filters, 5 settling tanks, 3 melting tanks, 263 shipping drums, and the salaries of Professors Aliou Badra Cisse and Daniel Coulibaly (for 30 weeks of training a piece).

The second request is traditional loan. This loan will be for the purchase of a storage facility in Bamako. According to sources in Bamako, a storage facility will cost approximately 5,000,000 CFA. If this facility was purchased on a 10 year loan, with an 8% interest rate, the annual payment for the loan would be 745,147 CFA.

A4. The Financing Request – Evaporative Cooler

B1. Summary Description of the Business - Shea

The Mali Agribusiness Center is currently composed of members that are a part of the IER (The Government Organization of Research in Agriculture) and the IPR (The Education College in Agriculture). Its main focus is on improving the agricultural industry in Mali while at the same time working towards becoming a self-sustaining organization. In the Shea industry in particular it will work to improve the quality of Mali Shea butter to meet the standards of the export markets. This will ensure strong relationships between Mali Shea butter producers and strategic export partners.

B2. Summary Description of the Business - Seed Potato

The Mali Agribusiness Center will grow, test, certify, market, and sell quality seed potato tubers to Malian farmers. In addition, the Center will provide storage and cooling as well as a distribution network for seed potatoes. Seed potato tubers will be grown and distributed to farmers in Borko (14.971320,-3.359413) and the surrounding area. This location provides optimal growing conditions with disease free soil and favorable temperatures. The center will also provide storage and cooling to extend dormancy of the seed potato. This facility will also be strategically located in the Borko region. The Center will also provide transportation logistics from the seed potato growing region to the area of Sikasso where 80 percent of the table potatoes are grown in Mali. Transportation requirements are that seed potatoes must not be damaged during shipment. Moreover, the shipment container must be in sterile condition to prevent contamination of the seed potatoes. Finally, the Center will provide marketing and education services to aid in the promotion of Malian seed potatoes. Marketing deliverables will include such items as brochures, certification

B3. Summary Description of the Business - Honey and Bees Wax

In Mali apiculture is mainly dominated by men and covers almost all the country. The main regions of apiculture are: Sikasso, Koulikoro, Segou, Kayes and Mopti.

The Agribusiness center will develop its bees and bees wax initiative in the regions of Sikasso, Koulikoro and Segou.

In each of these regions three zones will be selected:

Sikasso

In Sikasso region, Bougouni, yanfolila and kadiolo will be selected

Koulikoro

In Koulikoro region, Ouelessebougou, Diola and Selingue will be selected

Ségou

In Ségou region, Segou, Baraoueli, and Konobougou will be selected

Each zone will cover 30 villages with 3 units (a unit being a group of ten villages working together for honey and bees wax production)

The criteria prevailing for the selection of these three regions are as follows:

- Village access
- Presence of a high honey production potential
- Presence of motivated producers of honey and bees wax
- Proximity of urban markets

The Agribusiness Center honey and beeswax initiative is a central hub for communication of best practices and market demands to Mali farmers, while also offering high quality products to local and international buyers. The central office is located in Bamako, the capital city of Mali. It works in conjunction with the IPR and IER, but remains a separate private entity with its own board of directors.

B4. Summary Description of the Business – Evaporative Cooler

Needs input

D1. The Target Market - Shea

The target market for the Agribusiness Center Shea butter initiative are the cooperatives involved in Shea butter production as well as companies locally and globally that purchase Shea butter from West Africa. During the early stages of this initiative the Agribusiness Center will have a large target audience, which will then come down to maintaining relationships as the target audience is captured. There is a potential for a growth in target market if there are new uses identified for Shea butter.

D2. The Target Market - Seed Potato

There are two target markets to consider: the seed potato farmer and the table potato farmer. Currently, there are no seed potato farmers in Mali as the country imports all of its seed potatoes from Europe. The Center must focus its efforts on capturing farmers who are willing to grow and produce quality seed potatoes. The profit potential of seed potatoes must be greater than existing cash crops in the Borko region (garlic and onions).

The second target market is the table potato farmers of the Sikasso region. Currently this market purchases its seed potatoes from a network of importers aligned with European countries. Delivery of these seed potatoes is inconsistent at best and often occurs outside of the optimal growing season (November). Moreover, the seed potatoes are growing in the northern climate region which is unfavorable to the more arid region of Mali, Africa. This often results in lower table potato yields.

D3. The Target Market – Honey and Beeswax

In 2004 the top 5 countries that imported honey and beeswax were: Germany ($230.7 million USD), United States ($149.6 million), United Kingdom ($75.1 million), Japan ($65 million), and France ($54.5 million).

Traditionally, honey and beeswax in Mali has only targeted the domestic market. Yet with the increased demand in the world's consumption for sweeteners and cosmetics, it makes sense that the Agribusiness Center looks outside the country to foreign markets. The United States imports almost 4 million pounds of beeswax each year.

Since Mali is a preferred country in regards to exporting to the United States, and since the demand is high enough in the United States it bodes well for the Agribusiness Center to focus on exporting to the United States.

D4. The Target Market – Evaporative Cooler

F1. The Economics, Profitability, and Harvest Potential – Shea

F2. The Economics, Profitability, and Harvest Potential – Seed Potato

The Mali Agribusiness Center seeks to become a self-sustaining organization through the sale of agricultural products such as seed potato tubers. Revenues generated through the sale of seed potato tubers will pay for administrative overhead, equipment, marketing, and related infrastructure costs.

F3. The Economics, Profitability, and Harvest Potential – Honey and Beeswax

Currently, Professor Aliou Badra Cisse is working with 50 villages. He is educating them on best practices and techniques, which includes the use of modern hives such as the Kenya Top Bar Hive. These hives allow the farmer to harvest honey approximately three times a year with an average yield of 12 kilograms of honey and beeswax combined.

The average farmer keeps close to 100 hives. Assuming that there is one farmer per village, and that each farmer has 100 hives (which are harvested 3 times per year) then it is easy to calculate that there is a potential yield of 180,000 kilograms of honey and beeswax.

These 180,000 kilograms of honey and beeswax convert to 125,252 liters. The current rate for a liter of raw unprocessed honey is about 650 CFA. The total potential buying price for this unprocessed honey would be 81,414,170 CFA. After processing, the total amount of honey that is possible for sale would be 83,919 liters, while the total amount of beeswax for sale after processing would be 59,400 kilograms.

The retail price for a liter of processed honey is 2,000 CFA. The retail price for a kilogram of processed beeswax is 600 CFA. The total sales for the honey and beeswax could quite possibly be 203,478,444 CFA. The gross margin would be 60%.

F4. The Economics, Profitability, and Harvest Potential – Evaporative Cooler

While there are many forms of cooling technologies available in the world, it is very difficult to single out one product that has a practical application for urban and rural Mali. Basic infrastructure challenges and prohibitive electricity costs leave rural Mali without effective cooling solutions in hot season temperatures that exceed 40 degrees Celsius. In urban Mali, traditional air conditioning systems run on 1000 watts of power which is expensive for even those who can afford a cooling solution. There is an

opportunity to create a better cooling solution for all Malians that creates a more comfortable ambient temperature, especially during the hot season.

The Mali Agribusiness Center will be prepared to launch the evaporative cooling system by 2010. This system will use nearly half the amount of energy as a traditional air conditioning system. This first-generation system will be a viable solution for urban Mali and areas connected to a power grid. The Mali Agribusiness Center will continue to partner with local engineering schools to further develop the system in order to create an application that uses no electricity from a power grid.

The Agribusiness Center will employ a push marketing strategy that utilizes existing retail channels for air conditioning systems. The evaporative cooler business unit will operate as a for-profit unit. Revenue from the evaporative cooling initiative will help sustain the Agribusiness Center through the initiation phase of several strategic initiatives.

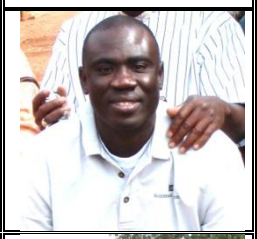
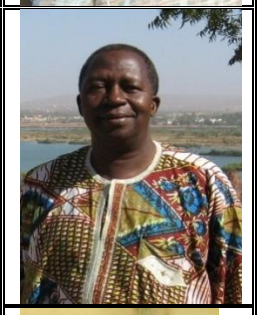
G. The Team

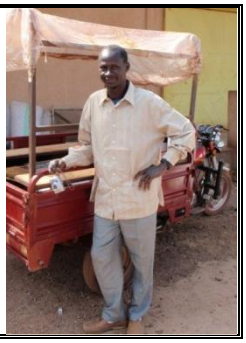
The Mali Agribusiness Center will be lead by Belco Tamboura under the guidance of Mamoudou Traore (IPR) and Madame Guamby (IER). Key members of the Seed Potato initiative will Adama Berthe and Mme. Aissata Thera. Supporting members of the Agribusiness Center are Sidy H. Ba, Abdoulaya Camara, and Keriba Coulibaly.

The chair of the board for the Agribusiness Center is Belco Tamboura. The board member that is directly responsible for the implementation of the honey and beeswax initiative is Keriba Coulibaly. Professors Aliou Badra Cisse (IER) and Daniel Coulibaly (IPR) are specialists on honey and beeswax production in Mali. They will be responsible for training the farmers on the best practices and techniques. Professor Cisse will also be responsible for the daily operations of the processing facility in Bamako, Mali.

Professor Richard D. Fell (Virginia Tech) and his students, Dana Gilmore and Leah M. Harris, are outside stakeholders who are currently providing an evaluation of the products generated by beekeeping practices in Mali. The team will also be identifying the value chain for honey and beeswax product in Mali.

Professor Ernest Owens (University of St. Thomas) and student Austin B. Campbell are also outside stakeholders. The responsibility of this team is to implement a practical strategic plan for the honey and beeswax initiative.

Names	Institut/Institute	Photos
Abdoulaye Camara	IER/CRRA Sotuba Seed Potato Initiative	
Adama Berthe	IPR/IFRA de Katibougou Seed Potato Initiative	
Mme Thera Aissata Traore	IER/CRRA Sotuba Seed Potato Initiative	
Belco Tamboura	IPR/IFRA de Katibougou Shea Butter Initiative Team Coordinator	
Sidy Ba	IPR/IFRA de Katibougou Evaporative Cooler Initiative	

Keriba Coulibaly	IER/CRRA Sotuba Honey and Bees Wax Initiative	

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A. Mali Agribusiness Center

Strategic Business Plan for the Shea Butter Initiative

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A The Industry

Shea Butter which is called the 'Gold of the Beauty Industry' or 'Liquid Gold' is a rapidly expanding industry in West Africa. The Shea or Karite tree grows in the Savannah region of West Africa. The 19 countries that are on the 'Shea Belt' are, Ghana, Sudan, Zaire, Ethiopia, Benin, Central African Republic, Cameroon, Senegal, Burkina Faso, Sierra Leone, Nigeria, Mali, Niger, Togo, Uganda, Guinea, Cote d'Iviore (Ivory Coast), Guinea Bissau & Chad.

Women in rural Africa are primarily involved in the harvesting and processing of Shea nuts into Shea butter. These rural communities in West Africa reap significant benefits from Shea butter production. The tons of Shea butter that are exported around the world each year, help provide these rural communities with basic necessities such as fresh water, medical treatment, housing, and schooling.

According to the Shea Network, Mali has the largest under-developed area of productive Shea parkland in the sub-region (potential production is estimated to be 250.000 tons for only 150.000 tons collected). Most of this Shea parkland lies along the western part of the country. The quality of the Shea nuts and Shea butter has been the primary reason hindering the marketability of their products. In Mali Shea butter has been used locally for the purposes of cooking. Initiatives in progress to improve the quality of the nuts and butter will benefit the Shea industry in Mali. The Mali Agribusiness Center is working in that line as more than three millions rural women derive their income from collecting and processing Shea nuts.

B. The Company

Shea is one of many initiatives that the Mali Agribusiness Center will focus on to add value to the process. Primarily it will be looking into working with the various cooperatives and unions to manage the quality of Shea butter production and storage to meet the requirements of the export (US/Canadian) markets.

C. The Products or Services

Due to its natural moisturizing and healing qualities, Shea butter is in a number of cosmetic products such as soaps, creams, lotions, and conditioners. While the cosmetics industry is a growing market for Shea butter, 90% of the Shea exported from West Africa is used in the chocolate industry as a substitute for cocoa butter. West African countries like Ghana and Burkina Faso in particular have recognized the growing importance of Shea butter and have taken steps to build strategic partnerships with export partners.

At present Senegal is the only nation that exports Shea butter from the Mali Shea cooperatives directly. There are instances where Shea butter is purchased by local vendors and imported to the international market, but there is very little statistics available on these transactions.

What the Mali Agribusiness Center can offer in terms of products and services to the Shea industry are geared towards meeting quality standards required by the export market. The kit to test the acidity and rancidity of Shea butter will ensure a certain level of quality. The Mali Agribusiness Center will also be working to negotiate and connect export partners directly with Shea cooperatives. In addition the Mali Agribusiness Center will take on the role of looking at best practices in the industry and transferring that knowledge to the various Shea producers. This will ensure improved quality standards by all Shea butter producers in Mali.

D. Entry Strategy or Growth Strategy

Europe has been a primary export partner for West African Shea nuts as an ingredient in chocolates and more recently for Shea butter production in cosmetics. With the explosion in the use of Shea butter in the cosmetics industry, there is an opportunity for Mali to benefit from refining the Shea butter to meet export quality standards.

At present, West Africa's primary export partner for Shea is Europe which is mostly in the form of raw nuts. Raw nuts which are processed into Shea butter is then exported from Europe to the US for use in cosmetics. There exists an opportunity for Malian Shea butter producers to export butter directly to the US. This will however require meeting the strict quality and labeling standards of the FDA. (See Link below) **http://www.watradehub.com/images/stories/downloads/Export%20Guides/Shea%20Butter%20Export%20Guide%20V.2.2.pdf**

E. Market Research and Analysis

a. Customers

UNIFEM helped Shea butter producers in other countries in the region such as Burkina Faso, and Ghana eliminate the middle-man and negotiate directly with cosmetic companies in Europe. This ensures that the Shea butter producers receive a greater share of the revenues instead of losing that value to the middle-man. In addition to **that, the cosmetic** companies are able to work directly with the Shea butter producers on the required level of quality of the butter.

Much of the Shea butter imported into the US has primarily been from Europe. More recently the West African International Business Linkages (WAIBL) program which is funded by USAID initiated discussion between U.S. and West African companies to promote direct trade in the Shea butter industry.

b. Market Size and Trends

According to WAIBL program the U.S. imported more than 800 metric tons ($13M) of Shea butter in 2001 which was an increase of 11% from the previous year. While a majority of imports in the early 2000s was from Europe, U.S. companies are looking to trade directly with Shea butter producers in West Africa. The expectation was that direct imports from West Africa will grow by about $500,000 annually.

The current consumer trend globally and particularly in the US has been a shift towards 'going green' and 'going organic.' Consumers are interested in being better educated about the products they purchase and use. According to an article by Leonie Tait, there is a shift towards products made from natural ingredients that driven by an increased desire for healthy lifestyles. Euromonitor International predicts a growth in the natural cosmetics market through 2010.

c. Competition

There is a shift by many of the Shea producing countries to market Shea butter directly to cosmetic companies. Since the Karite tree only grows in the region of West Africa, the competition in this industry for Mali is primarily from other countries in the region that are working towards direct marketing to cosmetics companies. There is also the competition from the industrial processing capabilities of European companies that purchase raw nuts from West Africa and process it into Shea butter.

d. Estimated Market Share and Sales

Based on discussions with the marketing personnel of various Shea cooperatives in Mali, 90% of Shea butter produced in Mali is used locally. Only 10% of Shea butter produced is exported and a majority of this is exported to Senegal. That is, very little Malian Shea butter is directly exported to countries outside of Africa.

The cooperative in Zantiebougou which is responsible for approximately 30% of Shea butter production in Mali, is expecting their butter production to increase from approximately 20 Tons in 2008 to 40 Tons in 2009. This is a result of a 3 year development plan that has been in place since 2005. Their next 3 year development plan includes an initiative towards organic Shea butter to meet shifting consumer demands. With the increase in Shea butter production they expect that they will be able to export 20% of production which consuming 80% locally. The cooperative does not expect a significant shift towards export as a result of increased production.

The agribusiness Center will target three Shea production areas: Koulikoro, Sikasso and Segou during the first two years of operation. The main cooperatves that will be targeted are: "Union Locale des Societes Cooperatives pour la Valorisation du Beurre de Karite" (18 Cooperatives), "Union Locale des Productrices de Karite" de Dioila, Cooperative des Productricese de Karite de Siby », « Cooperative des Productrices de Karite de Zantiebougou ».

During the third year it will extend its activities in two other areas such as: Kayes (Kita zone) and Mopti.

e. Ongoing Market Evaluation

The initiatives that the Mali Agribusiness Center is focusing on for Shea surround quality standards of Shea butter in Mali. They worked with Montana State University to develop a kit to test the acidity and rancidity of Shea butter. The plan is to look into cost effective ways to assemble this kit for distribution to Shea cooperatives in Mali.

In addition to that, the Agribusiness Center has been working with the University of St. Thomas to document the Shea supply chains of the various cooperatives. They will work towards identifying best practices in Shea production to improve quality and disseminating this information to cooperatives to improve the standard of Mali Shea butter as a whole. The Agribusiness Center will also work towards creating strategic export partnerships with Mali Shea producers and cosmetic companies in the US and Europe by certifying the quality of Shea butter produced by cooperatives.

F. The Economics of the Business

a. Profit Potential

According to a study by UNIFEM in '97 (before the explosion of Shea butter use in Cosmetics) a ton of unprocessed Shea nuts sold domestically for CFA 70,000 and externally for CFA 100,000 brought in CFA 148,000 when processed into Shea butter. That is a minimum of 50% in revenue loss by not taking the raw nuts to the next stage of Shea butter.

The profit potential of Shea butter is reliant on being able to obtain competitive prices for the butter produced. Current prices for Shea butter produced in Zantiabougou are as follows:

Sold in Bamako 3000 CFAs/kg (best quality)

750 CFAs/200g (best quality)

Sold at the boutique in Zantiabougou 600 CFAs/500g

300 CFAs/250g

b. Fixed and Variable Costs

The Fixed costs in the Shea butter industry are in the equipment used in processing the nuts into butter. With the various levels of mechanization at each of the cooperatives, the fixed costs for expanding production will vary.

There are a number of Variable Costs in the Shea butter industry. According to the Zantiabougou cooperative, the major variable costs are as follows:

Shea Nuts = 500-550 CFAs/kg

Shea Workers = 1,500 CFAs/day

Packaging: Sachet (small) = 10 CFAs

Sachet (large) = 15 CFAs

Jar (small) = 100 CFAs

Jar (medium) = 300 CFAs

Jar (large) = 1000 CFAs

Shipping 8-11 Euros/kg (buyer pays shipping) [5,200-7,200 CFAs/kg]

c. Break-even Point

According to the various cooperatives, one of the major hindrances to export of Shea butter from Mali is the high cost of shipping by air. With Mali being a landlocked country, there is limited access to shipping via sea. Since the norm is that buyer pays for shipping via air, there is the illusion of a high price of Shea butter which is driven by high cost of shipping. The Ivory Coast is one option for Mali to ship by sea, however with the unstable political situation in the Ivory Coast that is not a very viable option.

There are discussions on collaborating with Burkina Faso and Ghana to ship via the coast of Ghana. In this case, there is a potential that the seller would pay for shipping up to the coast and the buyer pays for shipping from the coast of Ghana to destination.

G. Marketing Plan

a. Overall Marketing Strategy

The Mali Agribusiness Center will market itself as an organization that works with the various cooperatives to certify the quality of Shea butter produced in Mali. The cooperatives will need to be educated on the importance of certification to maintain relationships with Shea butter export partners. They will also need to be educated on the added return from taking the added risk of marketing to organizations that demand a higher quality.

b. Sales Tactics & Pricing

As part of this strategy the Mali Agribusiness Center will market a kit developed by Montana State University students to test the acidity and rancidity of Shea butter to the various cooperatives. The Agribusiness Center has had demonstrations to begin the education process for using the kit to improve the quality of Shea butter. While this kit is currently not in production in Mali, the Agribusiness Center will work towards assembling a cost effective kit that is affordable for the various cooperatives in Mali. This kit will be marketed at a price that covers the cost of assembling, and marketing it and at the same time affordable enough for the cooperatives.

As an organization that certifies the quality of Shea butter produced in Mali, the Agribusiness Center will focus on marketing itself to potential companies that are interested in importing Shea butter. They will also market the importance of quality certification to the Shea cooperatives to validate being able to levy a fee for the Agribusiness Center quality certification. Along with certifying the quality of Shea butter, the Agribusiness Center will also certify organic Shea butter to those partners who are interested in natural products. The price charged for certification will initially be low, until the Agribusiness Center establishes itself in the eyes of Shea butter consumers as well as cooperatives.

The Agribusiness Center as a repository for information on best practices in the Shea butter industry will open up the repository for cooperatives interested in having their Shea butter certified by the Center. Not only does this help disseminate the information to Mali Shea producers, it helps with the certification process for the Center to know which producers are incorporating best practices into their process.

c. Service and Warranty Policies

Service and Warranty will be a part of what the Agribusiness Center offers to both strategic partners and Shea cooperatives. As a marketer of the quality kit for Shea butter, the Center will educate users (cooperatives) as well as provide service or warranty for the kits that are sold.

As an organization that certifies the quality of Shea butter the Agribusiness Center is not only responsible to ensure a level of quality to the buyer, it is also responsible to ensuring competitive prices for the cooperatives.

H. Manufacturing and Operations Plan

a. Geographic Location

The geographic locations in Mali that fall under the Shea belt are primarily south of the Niger River. The Shea tree is not currently grown for the purpose of producing Shea nuts or butter. Instead these Karite trees grow wild in the parklands and women go out into these wooded areas to pick the raw nuts and bring it back to the village.

There are four main villages/cities involved in Shea butter production in a more or less organized way, that we are aware of, Zantiebougou, Siby, Dioila and Koulikoro. While these are villages where Shea butter is produced, that is not to say that the Karite tree does not grow elsewhere. The Shea cooperatives in these locations act as a central location that purchases raw nuts that have been harvested by women and these nuts are then stored on site and processed into butter at a later time.

The benefit of having a narrow belt where the Karite tree grows and Shea butter is produced is that it is easier to educate producers on best practices and ensure that the knowledge is passed on within the region.

b. Facilities and Capacity Improvements

The cooperatives at each of the four locations mentioned above have different models as to how they operate. Some cooperatives purchase the nuts from the members and then provide the necessary equipment and pay members to process the nuts into butter. Other cooperatives allow the members to have ownership of the nuts and provide the equipment to process the butter and then purchase the final product from the members.

Based on observation, some cooperatives like Zantiabougou have a more manual process for processing Shea butter while others like Dioila are more mechanized.

c. Strategy and Plans

The cooperatives each have their own strategies and plans for improving their processes and profit. There is also a nationwide initiative by the Malian government to focus on improving the Shea industry. The Agribusiness Center as a repository for

information can work with the various NGOs to bring everyone to the table to ensure that there is no duplication of efforts and new initiatives are leveraging off past experiences.

Some of the initiatives in place at the cooperative as well as national level include purification tests, filtration, and modernization of processes. However a lack of technology has been an issue faced by Malian Shea producers. Other initiatives that are expected to begin in the next 2-3 years include, certification of agricultural products, diversification, increasing income for farmers.

While the Agribusiness Center will be focusing on improving the quality of Shea butter to meet export standards, it will not be losing sight of the local markets. According to the cooperatives the local markets while low return is also low risk due to the lower demands on quality. This opens up the possibility of having different grades of quality when certifying Shea butter. The highest quality will be used for export while the lower quality will be used for various markets locally as well as globally depending on requests.

d. Regulatory and Other Compliance's and Approvals and Environmental Issues

There are a number of environmental and cultural issues facing the Shea industry in Mali. Since the Karite trees grow in the wild it is dangerous for women to go into wooded areas and harvest Shea nuts. Many women are bitten by poisonous snakes while harvesting Shea nuts. Transporting the harvested Shea nuts is also a problem. Since most women carry the nuts in baskets on their head, there is a limited amount of Shea nuts that they are able to harvest at a time. The Shea nut picking period falls around the same time of the year as harvesting. Due to the cultural norms of Mali, women need to tend to the needs of the males (who are harvesting) and children as a priority. Therefore not all women have the time to pick Shea nuts during the season.

Other issues that face the Shea industry include a lack of proper irrigation to the Shea producing villages. In discussion with the various stakeholders involved in Shea production, they have not received much in terms of assistance from the Malian government on the issue of water supply. Based on their reactions, the understanding is that they don't expect to receive much assistance in irrigation in the future. This could turn out to be a road block in expanding Shea butter production.

Regulatory and Compliance issues that the Mali Shea industry will face mostly relate to export. In particular, it relates to exporting to countries like the US and Europe which have very strict regulations on ingredients, packaging, labeling and statements on the benefits of a product. (See Link below) **http://www.watradehub.com/images/stories/downloads/studies/4%20US%20Shea%20Butter%20Market%20Study%20%28C%20Stathacos%29.pdf**

In the long-term one of the major environmental issues facing the Shea industry is the disappearing of the Shea parkland as identified by union in Dioila. At present there is so much focus on harvesting the Shea nuts, that there is no focus on regeneration of Shea

parklands. The Karite tree takes a long time to mature and start producing nuts, therefore the disappearing of Shea parkland is a serious concern that needs to be addressed.

I. Management Team

a. Organizational Chart

b. RASIC

Mali Agribusiness Center (MABC) – Shea Butter Initiative							
	Belco	**Sidy**	**Keriba**	**MABC Others**	**Mme Gaumby**	**External Partners**	**Coops**
Identification of best production practices	**A**	**R**	**R**	**I**			**C**
How to disseminate information	**R**	**C**	**C**	**S**	**I**		**S**
Quality Control	**R**	**C**	**C**	**S**	**I**	**I**	**S**
Storage	**C**	**R**	**S**	**A**		**I**	**S**
Marketing	**R**	**C**	**C**	**S**	**I**	**I**	**S**
Creating partnerships	**R**	**C**	**C**	**S**		**S**	**S**

R=Responsible A=Approving S=Supporting I=Informed C=Consulted

c. Key Management Personnel

Belco Tamboura will be taking the lead on the Shea butter initiative of the Mali Agribusiness Center with Sidy Ba focusing on storage and Keriba Coulibaly on operations. As the Agribusiness Center kicks off their initiative they will need to hire personnel to manage various parts of operations of the Center like marketing, quality and building partnerships.

J. Requested Financing

The Agribusiness Center is requesting initial financing to set-up the center's operations in Bamako, Mali. The goal of the center is to be a self-sustaining entity that does not require additional financing to continue operations.

Following the initial financing for operations, the Agribusiness Center will be responsible for working with financial institutions to request financing in the form of a loan that will be repaid with interest. Profits from operations will be used partially to pay-off debt outstanding and partially to be re-invested in new initiatives identified by the Center.

K. Critical Risks and Problems

SWOT

Strengths

- **The Mali Agribusiness Centers network**
- **Center's partnership with UST & MSU**
- **Zantiabougou has been recognized for it's Shea butter quality**

Weaknesses

- **Current quality of Shea butter does not meet international export standard**
- **Poor irrigation available to Shea producers**
- **Insufficient areas available for drying nuts**
- **Insufficient number of members joining the co-operatives with knowledge of making Shea butter**

Opportunities

- **Increase harvest of Shea to meet export needs (does not infringe into local demand)**
- **New law passed in Mali that allows people to own land for agricultural purposes**
- **Consumer preference shift towards natural products**

Threats

- **Disappearing of Shea parkland (no initiatives to regenerate)**
- **19 Other countries on Shea belt with potential to produce Shea butter**
- **Political situation in surrounding countries impact transporting of exports**

L Financial Plan

Shea butter quantity to be purchased and destined to different markets (in metric tons)

years / Quantity for	2010	2011	2012	Total
National market	100	100	50	**250**
Sub regional market	55	150	250	**455**
International market	-	150	500	**650**
Total	**155**	**400**	**800**	**1335**

The following table shows the revenues according to the destination markets (in CFA Francs /ton)

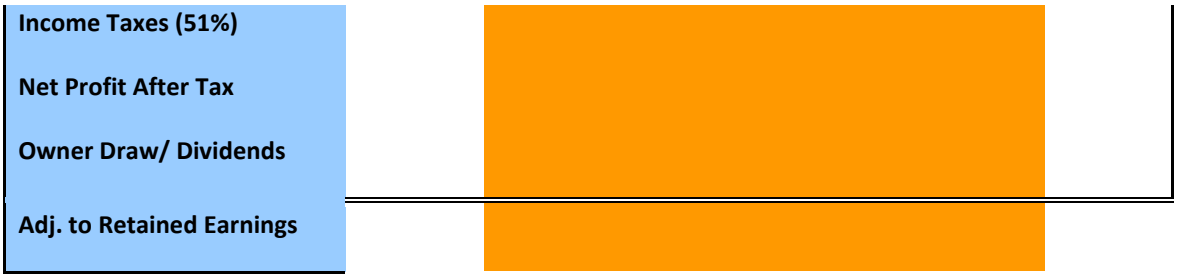
Destination markets	National market	Sub regional market	International market
Revenues per ton	850.000	1.250.000	2.500.000

Sales according to the destination markets

Destination markets	National market	Sub regional market	International market
Sales	850.000	1.250.000	2.500.000

years / Quantity for	2010	2011	2012	Total
National market	85.000.000	85.000.000	42.500.000	**212.500.000**
Sub regional market	68.750.000	187.500.000	312.500.000	**568.750.000**
International market	**-**	375.000.000	1.250.000.000	**1.625.000.000**
Total	**153.750.000**	**647.500.000**	**1.605.000.000**	**2.406.250.000**

P/L Forecast	2010	2011	2012
Sales	**153.750.000**	**647.500.000**	**1.605.000.000**
COGS	93.000.000	240.000.000	480.000.000
Gross Margin	60.750.000	407.500.000	1.125.000.000
Operating Expenses			
Salary (Office & Overhead)	19.000.000	20.900.000	23.000.000
Payroll (taxes etc.)			
Outside Services			
Supplies (off and operation)			
Repairs/ Maintenance			
Advertising	10.000.000	7.500.000	7.500.000
Car, Delivery and Travel	4.500.000	3.500.000	3.000.000
Facilities Land Loan			
Telephone	350.000	400.000	450.000
Utilities			
Insurance			
Taxes (real estate etc.)			
Interest			
Depreciation			
Other expense (transportation)	3.000.000	15.000.000	40.000.000
Total Expenses	36.850.000	47.300.000	73.950.000
Net Profit Before Tax	23.900.000	360.200.000	1.051.050.000



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Appendix 5 – Shea Butter Import Report

Table of Contents

Introduction

The following document outlines some considerations for exporting shea products from Mali to the United States. The first portion of the document outlines shea production in other parts of Africa along with comparable market prices for shea products currently being sold in the United States. Guidelines for Malian producers of shea products are included for reference as their products are prepared and packaged. The bulk of the document then focuses on requirements for exporting the shea products. There are many specific regulations imposed by the United State's government when importing products of this nature. Extreme attention to detail and research should be done before attempting to complete the transactions.

There are four primary means by which products can be exported to the United States: partnering with a current importer, personally bringing in small amounts of the product, using a currier, and using a brokerage agent/shipping firm. These four options and rough estimates of costs are explained in detail in the document. As a whole, the more convenient the option, the more expensive it is. Finally, an appendix is provided with more information on FDA regulations, different certifications, and additional details on government requirements on imports.

Guide to Importing Shea

I. Shea Butter in other parts of the world

A. Currently, Ghana is estimated to produce 130,000 metric tons of Shea nuts annually, 70,000 tons of which are used locally while 60,000 tons are exported. About 45,000 are exported as raw nuts and 15,000 tons as butter. (http://allafrica.com/stories/200910271142.html)

B. Uganda Report on Shea prepared for USAID: http://www.foodnet.cgiar.org/market/Uganda/Reports/Shea%20Report.pdf This is a very extensive report on the shea industry; however, most of the information is background on the industry and also relates to Uganda. However, there are several relevant facts in the report:

1. Shea nut can be used as a substitute for cocoa and is commonly used as such
2. Currently there is more potential than demand
3. Only a small percentage of shea is used in cosmetics
4. From interviews and market visits it was estimated that the total quantity of Shea nuts traded through the northern Ugandan markets per year is approximately 6,000 tons which is a $660,000 market value
5. The most well publicized community is the Ghanaina village that is linked with the Body shop UK. In this case, the cosmetic company is working directly with women's groups to produce a high quality product that is then further refined and incorporated into the Bodyshop Shea product range. These products were highly promoted in the summer season of 2001.
6. Producers have tended to prefer shea from Ghana because of high quality and low government interference with trade.

7. In West Africa, particularly Ghana and Mali, marketing channels are well defined and there has been a long standing export of shea nuts and butter to a number of European and North American countries, primarily for the cocoa substitute use.
8. Mali, the largest producer of shea nuts, is estimated to produce approximately 150,000 tons of nuts per year.

II. Characteristics of American Shea Consumers: A thorough market analysis would need to be conducted to validate the following claims. At this time they are based on anecdotal observations. The following are hypothetical observations of the consumer market in America:

- Affluent, meaning able to pay a high price for quality
- Eco-conscious, meaning willing to pay a higher price for natural products that don't contribute to global warming or create toxic materials that harm plants, animals or humans.
- Educated
- Have dry skin or skin conditions that are eased by moisturizers. In winter, many people experience dry, itchy skin and there is a large market of products available to address these issues.
- Mostly women but a number of men are also looking for relief from dry skin.
- Fair trade – consumers are willing to pay a higher price if the workers providing the product (in this case, the women who make the shea) are making a fair wage. It requires transparent accounting for the exporter – in order to assure this is the case. Some US companies (distributors of imported goods) get a certification for Fair Trade. They have to show many things so it is an expensive process. Thus, the market for the product has to be large enough so the cost of certification is less than the benefit.
- Consumers are looking for a high quality product which includes the following characteristics:
    - Long lasting moisturizing ability
    - Easy to use
    - Smooth
    - Non oily
    - Pure color (we are not sure which color will be best in the American market)
    - Attractive packaging: African-style packaging is best, correct weights are imperative, and it is possible to package the items in the US.

III. Market for Shea Butter

A. Online sales options

1. The American Shea Butter Institute provides consumer and industry education on Shea Butter; establishes voluntary standards on the quality of Shea Butter entering the USA; and promotes the benefits of Shea Butter in various US industries. They can act as a referral to find ways to sell shea butter: http://sheainstitute.com/index.php/refferal-services/need-a-source-to-sell-shea-butter.html

2. Etsy is an online market for unique hand-made arts and crafts. http://www.etsy.com/ Products must be hand-made and posted by the artisan. It costs 20 cents to list an item for four months. When your item sells, you'll pay a 3.5% transaction fee.

3. Shea Yeleen is an organization with connections to the University of St. Thomas. Shea Yeleen's mission is to organize and train women owned cooperatives to produce, market, and sell high quality shea butter; and educate consumers in the U.S. about natural body care products and fair trade. There are partnership opportunities with Shea Yeleen. In addition, they are working to build a facility in Dio, Mali. Visit www.sheayeleen.org for more information.

Shea Soap Comparables

Retailer	Price/oz	Price/gram	Additional notes
The Body Shop	$1.14	$0.04	Sold in 3.5 oz bar, from Ghana, Community Trade item
Ten Thousand Villages	$1.16	$0.04	Sold in .43lb bars at $8, from Ghana
Burt's Bees	$1.00	$0.035	Sold at Target in 4 oz bars
L'Occitane Lavender Shea Soap	$1.13	$0.04	From Western Africa, sold in 8.8 oz $10 bar

Raw Shea Comparables

Retailer	Price/oz	Price/gram	Additional notes
Shea Butter Hut.com	$1.00 + shipping	$0.035	From West Africa
CrabAppleSoap.com	$0.74 + shipping	$0.026	Handmade in Fair Trade village, raw unrefined
Sheanmore.com	$0.25 + shipping	$.0.01	Ghana, raw unrefined, in bulk
Soapgods.com	$0.29 + shipping	$0.01	This is price in maximum quantity of 55lbs. Price of 1 lb is $0.52

IV. General information on exporting Shea from Mali

A. GSP country details: http://www.ustr.gov/sites/default/files/U.S.-Generalized-System-of-Preferences-Guidebook.pdf The U.S. Generalized System of Preferences (GSP), a program designed to promote economic growth in the developing world, provides preferential duty-free treatment for over 3,400 products from 131 designated beneficiary countries and territories, including 44 least-developed beneficiary developing countries. Mali is a GSP country. However, it does not appear that shea soap is a GSP eligible product: http://dataweb.usitc.gov/scripts/gsp/gsp_tariff.asp) In other words, for a product to gain the benefits of no tariffs or duties under the GSP program, the product must be coming from a GSP country and be an approved GSP product. More information on the GSP program is included in Appendix A.

B. To search specific requirements of items by Tariff code: http://dataweb.usitc.gov/scripts/gsp/gsp_tariff.asp This is a link to the United States International Trade Commission. A product's HTS category number can be entered in to obtain all the specific requirements for tariffs and duties.

C. In general, air travel, although more expensive, appears to be best; passing through other countries poses significant threats.

1. http://www.watradehub.com/images/stories/downloads/studies/7th%20Report%20ENGLISH.pdf

D. When shipping boxes of products, the following instructions need to be met:

1. Mark all products and box as "Hand-made in Mali." It is possible to bring in hand-made products as long as 35% of cost of the main component is from Mali.
2. List ingredients and weight in oz & grams on label
3. List "made by" and "distributed by" on product, including zip code (A complete example on how to create an acceptable product label is included in Appendix E)
4. Fill out a detailed invoice which lists each individual product in the box, cost, quantity, and tariff code. Multiple items can be shipped in the same box; however, each individual item must be a line item on the outside label.
5. Tariff codes can be looked up at: http://hts.usitc.gov/
    1. Shea soap is code 3401.11.50.00
    2. Shea oil/nut code: nut oils:1515.90.21.00 nut: 1302.19.9140
    3. It would be best to call a representative at the International Trade Commission to verify

V. Importing/Exporting Options

A. Partnership with current importer

B. Personally Carrying

1. Import of less than $2000 in value can be carried in suitcase during personal travel.

C. Courier

With a courier, a premium is paid for all-inclusive shipment. Products are simply dropped off at the office of the courier in Bamako and arrive wherever specified in the United States. Courier services generally cover all damages in the shipping process. DHL is a courier that works out of Bamako. Prices are based on weight and continent of origin.

Based on quotes gathered from a current Ghanian importer, DHL's pricing model roughly fits the following equation, with potential room for negotiation:

$$\text{Cost} = 25.282(\text{KG}) + 136.8$$

eg. A shipment of 22.7KG (50lbs) would cost approximately $1400

D. Shipping Agent/Transport/Broker

Shipping without a courier is more complicated, but substantially less expensive. The import process requires three parties: A shipping agency (in Mali), the shipper (ie. Delta), and a Broker in the United

States. For shipments with costs over $2000, individuals may act as brokers but under most circumstances, US customs prefers to work with experienced brokerage agencies.

1. **Before Shipping**
    i. Each individual product must be labeled as outlined above (III. D)
    ii. A contract must be made in advance with a brokerage agency
2. **In Mali**
    i. A shipping agent in Bamako will provide the required paperwork that would be submitted to the transportation provider and U.S. Customs. The cost of a shipping agent is likely to vary with the agency, country and quantity shipped. Prices can be expected to range from $100 to $500. In general, three documents should be expected to be prepared and provided, though there may be additional country-specific considerations:
        a. Certificate of Origin (Generalized System of Preferences or other document)
            - To verify import from Mali (for duty regulations)
            - http://www.ustr.gov/trade-topics/trade-development/preference-programs/generalized-system-preference-gsp
        b. Air Waybill
            - Receipt given by the transportation provider as proof of the contract of carriage.
        c. List of items with Harmonized Tariff Codes (HTC) including
            - Item description (ie. Shea Butter Soap)
            - Quantity (200 units)
            - Unit Price ($2)
            - Total Cost ($400)
            - Harmonized Tariff Code (3401.11.50.00)
                i. HTCs can be found here: http://www.census.gov/foreign-trade/schedules/b/2009/index.html

3. **Shipment & Brokerage**

While multiple transportation options may be available from Bamako, Information that was available from Delta Airlines from Accra (Ghana) to Minneapolis (US) was used as an estimate of pricing for Bamako to Minneapolis. The following equation is a rough estimate of shipping and brokerage costs (rates will vary with weight cut-offs and brokerage service):

Cost= Rate + Fuel + Air Waybill + Handling
Cost= $4.38(KG) + $0.80(KG) + $35 + $15

Eg: A shipment of 22.7KG (50lbs) would be $167.58

This does not yet include Additional US customs and brokerage charges of approximately $250. So can we determine the expected total cost of a 50 lb shipment to be $420 or $18.50 per kilo. Given the Malian price of approximately 1000 CFA per kilo (or $2), the total cost is $20 per kilo. So we have to sell the product here for $10 for 500 gm just to cover price to Malians and shipping costs.

i. Additional information on customs and importing standards can be found at the customs and border protection document on importation: **http://www.cbp.gov/linkhandler/cgov/newsroom/publications/trade/iius.ctt/iius.pdf**

VI. Certification & Approval

A. Grade of Shea…etc

1. http://sheainstitute.com
    a. $600 for comprehensive test
    b. $250 for safety screening

B. FDA

1. If the shea is imported as soap under the FDA's definition, it does not need to meet FDA cosmetic approval. Criteria:
    a. A product is soap if 1) The bulk of the nonvolatile matter in the product consists of an alkali salt of fatty acids and the product's detergent properties are due to the alkali-fatty acid compounds, and 2) The product is labeled, sold, and represented solely as soap [21 CFR 701.20].
    b. A product is a cosmetic if the product If a product 1) consists of detergents or 2) primarily of alkali salts of fatty acids and 3) is intended not only for cleansing but also for other cosmetic uses, such as beautifying or moisturizing,
2. If shea is imported in its raw form, it appears it is considered a cosmetic. The Federal Food, Drug, and Cosmetic Act (FD&C Act) defines cosmetics by their intended use, as "articles intended to be rubbed, poured, sprinkled, or sprayed on, introduced into, or otherwise applied to the human body...for cleansing, beautifying, promoting attractiveness, or altering the appearance" [FD&C Act, sec. 201(i)]. Among the products included in this definition are skin moisturizers, perfumes, lipsticks, fingernail polishes, eye and facial makeup preparations, shampoos, permanent waves, hair colors, toothpastes, and deodorants, as well as any material intended for use as a component of a cosmetic product.
3. The FDA has strict guidelines around importing cosmetics: http://www.fda.gov/Cosmetics/CosmeticLabelingLabelClaims/default.htm
4. If the cosmetic makes a therapeutic claim, it is submit to approval as a drug through the FDA.
5. Cosmetic products imported into the United States are subject to the same laws and regulations as those produced in the United States. They must be

safe for their intended uses and contain no prohibited ingredients, and all labeling and packaging must be informative and truthful, with the labeling information in English (or Spanish in Puerto Rico). All color additives must be approved by FDA; many cannot be used unless certified in FDA's own laboratories. If the product has an intended use that causes it to be considered a drug, it must comply with the requirements for drugs, including establishment registration and drug listing. Additional information is included in Exhibit D.

C. Fair Trade

1. The process to become a Fair Trade company is quite extensive. It is a potential, eventually, for the shea project but requires a thorough application process after a few years of operation. Details of obtaining the Fairtrade stamp for small farmer's organizations can be found at the following link: http://fairtrade.net/pdf/sp/english/Generic%20Fairtrade%20Standard%20SF%20Dec%202005%20EN.pdf Additional information on Fair Trade can be found in Exhibit B.

D. Community Trade (fair trade equivalent in EU) (See Exhibit C)

Appendix

Exhibit A

GSP Information

Which imports into the United States qualify for duty-free treatment under the GSP?

A GSP-eligible import meets the following requirements (described in more detail below):

(1) It must be included in the list of GSP-eligible articles;
(2) It must be imported directly from a designated beneficiary developing country (BDC) or association;
(3) The BDC or association must be eligible for GSP treatment for that article;
(4) The article must be the growth, product, or manufacture of a BDC and must meet the value-added requirements;

(5) The exporter/importer must request duty-free treatment under GSP by placing an "A" before the HTSUS number that identified the imported article on the appropriate shipping documents (form 7501).

How is an article identified as GSP eligible in the HTSUS?

The letter **A** in the "Special" tariff column of the HTSUS identifies GSP-eligible articles at an eight-digit level. The following table presents three HTSUS tariff lines to illustrate variations in the treatment given to different GSP articles. Under each entry for a GSP-eligible article in the HTSUS, the letter **A**, **A+**, or **A*** in the "Special" column identifies the article as GSP-eligible under certain conditions. The letter **A** designates articles that are GSP-eligible for all BDCs. The letter **A+** indicates articles that are GSP-eligible only for LDBDCs. The letter **A*** identifies articles that are GSP-eligible except for imports from one or more specific BDCs that have lost GSP eligibility for that article. The HTSUS indicates the GSP status of articles as follows:

The burden is on the importer to say whether the products qualify, by using the A code to signify GSP as per 19 CFR 10.172. The request is made by placing the letter **A**, as a prefix, before the HTSUS tariff-line number when completing the shipment entry documentation. This letter is referred to as the Special Program Indicator (SPI).

FOR FURTHER INFORMATION CONTACT:
Tameka Cooper, GSP Program, Office of
the United States Trade Representative,
1724 F Street, NW., Washington, DC
20508. The telephone number is (202)
395–6971, the fax number is (202) 395–
2961, and the e-mail address is Tameka_Cooper@ustr.eop.gov.

Exhibit B

Fair Trade

Since 2000, fair trade sales and consumer awareness have increased tremendously, as the range of fair trade products has also expanded. From the early days of lace and home décor, handmade items now include clothing, sports equipment, toys, and other items. From its initial focus on coffee, fair trade product certification has expanded to tea, chocolate, sugar, vanilla, fruit, wine, and much more. In 2002, the first World Fair Trade Day was celebrated to heighten consumer awareness and to strengthen connections among fair traders and interested citizens around the globe. In 2006, IFAT reported that total fair trade sales topped $2.6 billion.

Traders who purchase Fair Trade Certified products agree to four principles: pay at least a price to producers that covers the costs of sustainable production (the Fairtrade Minimum Price), pay a premium that producers can invest in development (the Fairtrade Premium), partially pay in advance when producers ask for it, and sign contracts that allow for long-term planning and sustainable production practices. FLO also establishes specific product standards that govern the trade of each commodity to which licensees must subscribe.

Each organization undergoes a rigorous screening process to evaluate their trading practices and the depth of their commitment to these principles. By approaching business and development in a holistic way, members work to make trade a tool to alleviate poverty, reduce inequality, and create opportunities for people to help themselves. Member organizations offer a broad product range from coffee, tea, sugar, olive oil, and soap to accessories, home decor, stationary, baskets, personal care items, product packaging, unique gifts, and more. Only FTF members will display the FTF logo on materials connected to their businesses.

- $4.12 billion - amount of total fair trade sales in 2008 according to the UK's Fairtrade Foundation
- 102% - growth in US and Canadian sales for Fair Trade between 2004 and 2007 according to the Fair Trade Federation Interim Report on Fair Trade

Fair Trade information on nuts can be found at the following link:
http://fairtrade.net/pdf/sp/english/Nuts%20and%20Oilseeds%20SP%20March%2006%20EN.pdf

Application Process

Please send an electronic version of these materials to the FTF **Screening Coordinator**. If you are not able to submit these documents electronically, please mail four copies of the complete application to Fair Trade Federation.Submit

1. Application

Complete the application that best relates to the primary nature of your work, even if your organization fits into more than one category.

2. Financial Statement

Send a financial statement for the most recently completed accounting period. A profit/loss statement (preferred), tax return, or sales tax report is acceptable.

3. Suppliers List

Include a list of all of your suppliers. If working directly with producers, please list, where possible, the approximate number artisans/farmers/workers that make up each group with which you work. Include contact names, email addresses, and fax or phone numbers. This information will be kept confidential and will not be entered into the FTF database.

4. References

Submit at least three points (not letters) of reference, including email addresses, from those who can speak in depth about your trading practices. Applicants are best served by recommendations from current members of the Federation or other fair trade organizations, artisans, NGO partners, or contacts who are well versed in the principles of fair trade. Referencing at least one of your suppliers is preferred.

Please ensure that your references know to expect an inquiry from the Fair Trade Federation.

5. $50 Screening Fee

Mail a check made payable to the Fair Trade Federation or contact the **Screening Coordinator** to pay with a credit card via PayPal. This fee is non-refundable.

6. Other Materials (*optional*)

Feel free to include any promotional materials, articles written about your business, hangtags, product labels, your most recent annual report, or product samples that you feel would supplement your application. Items will not be returned.

Applicants will receive a confirmation email when materials are received. If you do not receive a confirmation, please contact FTF at 202-636-3547.

In addition to the non-refundable $50 screening fee, if admitted, applicants will then be assessed the appropriate level of dues based on sales during the most recently completed accounting period, as indicated by the following scale:

Up to $74,999 in gross sales, annual due is $150

Exhibit C

Community Trade

The Community Trade is similar to the Free Trade mark; however, it is within the EU. The Community trade mark gives its proprietor a uniform right applicable in all Member States of the European Union on the strength of a single procedure which simplifies trade mark policies at European level. It fulfils the three essential functions of a trade mark at European level: it identifies the origin of goods and services, guarantees consistent quality through evidence of the company's commitment to the consumer, and is a form of communication, a basis for publicity and advertising.

The Community trade mark may be used as a manufacturer's mark, a mark for goods of a trading company, or service mark. It may also take the form of a collective trade mark: properly applied, the regulation governing the use of the collective trade mark guarantees the origin, the nature and the quality of goods and services by making them distinguishable, which is beneficial to members of the association or body owning the trade mark.

The Community trade mark covers a market of more than 350 million consumers who enjoy some of the highest living standards in the world. The Community trade mark is obtained by registration in the Register kept by the Harmonization Office. When registered, transferred or allowed to lapse, the effect of such action is Community-wide. It is valid for a period of 10 years and may be renewed indefinitely. The rules of law applicable to it are similar to those applied to national trade marks by the Member States. Companies will therefore find themselves in a familiar environment, just on a larger scale.

Exhibit D

FDA

Cosmetic Labeling & Label Claims

The following information is a brief introduction to labeling requirements. For a more thorough explanation of cosmetic labeling regulations, refer to FDA's Cosmetic Labeling Manual and the regulations themselves (21 CFR parts 701 and 740). Firms also may wish to discuss their labeling needs with a consultant.

Proper labeling is an important aspect of putting a cosmetic product on the market. FDA regulates cosmetic labeling under the authority of both the Federal Food, Drug, and Cosmetic Act (FD&C Act) and the Fair Packaging and Labeling Act (FPLA). These laws and their related regulations are intended to protect consumers from health hazards and deceptive practices and to help consumers make informed decisions regarding product purchase.

It is illegal to introduce a misbranded cosmetic into interstate commerce, and such products are subject to regulatory action. Some of the ways a cosmetic can become misbranded are:

- its labeling is false or misleading,
- its label fails to provide required information,
- its required label information is not properly displayed, and
- its labeling violates requirements of the Poison Prevention Packaging Act of 1970 [FD&C Act, sec. 602; 21 U.S.C. 362].

Does FDA pre-approve cosmetic product labeling?

No. FDA does not have the resources or authority under the law for pre-market approval of cosmetic product labeling. It is the manufacturer's and/or distributor's responsibility to ensure that products are labeled properly. Failure to comply with labeling requirements may result in a misbranded product.

Some labeling terms you should know

Before proceeding with a discussion of labeling requirements, it is helpful to know what some labeling terms mean:

- **Labeling.** This term refers to all labels and other written, printed, or graphic matter on or accompanying a product [FD&C Act, sec. 201(m); 21 U.S.C. 321(m)].
- **Principal Display Panel (PDP).** This is the part of the label most likely displayed or examined under customary conditions of display for sale [21 CFR 701.10].
- **Information Panel.** Generally, this term refers to a panel other than the PDP that can accommodate label information where the consumer is likely to see it. Since the information must be prominent and conspicuous [21 CFR 701.2(a)(2)], the bottom of the package is generally not acceptable for placement of required information, such as the cosmetic ingredient declaration.

Is it permitted to label cosmetics "FDA Approved"?

No. As part of the prohibition against false or misleading information, no cosmetic may be labeled or advertised with statements suggesting that FDA has approved the product. This applies even if the establishment is registered or the product is on file with FDA's Voluntary Cosmetic Registration Program (VCRP) (see 21 CFR

710.8 and 720.9, which prohibit the use of participation in the VCRP to suggest official approval). False or misleading statements on labeling make a cosmetic misbranded [FD&C Act, sec. 602; 21 U.S.C. 362].

What about therapeutic claims?

Be aware that promoting a product with claims that it treats or prevents disease or otherwise affects the structure or any function of the body may cause the product to be considered a drug. FDA has an Import Alert in effect for cosmetics labeled with drug claims. For more information on drug claims, refer to Is It a Drug, a Cosmetic, or Both? (Or Is It Soap?).

How should products be labeled if they are both drugs and cosmetics?

If a product is an over-the-counter (OTC) drug as well as a cosmetic, its labeling must comply with the regulations for both OTC drug and cosmetic ingredient labeling [21 CFR 701.3(d)]. The drug ingredients must appear according to the OTC drug labeling requirements [21 CFR 201.66(c)(2) and (d)] and the cosmetic ingredients must appear separately, in order of decreasing predominance [21 CFR 201.66(c)(8) and (d)]. Contact the Center for Drug Evaluation and Research (CDER) for further information on drug labeling.

What languages are acceptable?

All labeling information that is required by law or regulation must be in English. The only exception to this rule is for products distributed solely in a U.S. territory where a different language is predominant, such as Puerto Rico. If the label or labeling contains any representation in a foreign language, all label information required under the FD&C Act must also appear in that language [21 CFR 701.2(b)].

What labeling information is required?

The following information must appear on the principal display panel:

- **An identity statement,** indicating the nature and use of the product, by means of either the common or usual name, a descriptive name, a fanciful name understood by the public, or an illustration [21 CFR 701.11].
- **An accurate statement of the net quantity of contents,** in terms of weight, measure, numerical count or a combination of numerical count and weight or measure [21 CFR 701.13].

The following information must appear on an information panel:

- **Name and place of business.** This may be the manufacturer, packer, or distributor. [21 CFR 701.12].
- **Distributor statement.** If the name and address are not those of the manufacturer, the label must say "Manufactured for..." or "Distributed by..." [21 CFR 701.12].
- **Material facts.** Failure to reveal material facts is one form of misleading labeling and therefore makes a product misbranded [21 CFR 1.21]. An example is directions for safe use, if a product could be unsafe if used incorrectly.
- **Warning and caution statements.** These must be prominent and conspicuous. The FD&C Act and related regulations specify warning and caution statements related to specific products [21 CFR part 700]. In addition, cosmetics that may be hazardous to consumers must bear appropriate label warnings [21 CFR 740.1]. An example of such hazardous products is flammable cosmetics.
- **Ingredients.** If the product is sold on a retail basis to consumers, even it it is labeled "For professional use only" or words to that effect, the ingredients must appear on an information

panel, in descending order of predominance. [21 CFR 701.3]. Remember, if the product is also a drug, its labeling must comply with the regulations for both OTC drug and cosmetic ingredient labeling, as stated above.

Is It a Cosmetic, a Drug, or Both? (Or Is It Soap?)

The legal difference between a cosmetic and a drug is determined by a product's intended use. Different laws and regulations apply to each type of product. Firms sometimes violate the law by marketing a cosmetic with a drug claim, or by marketing a drug as if it were a cosmetic, without adhering to requirements for drugs.

How does the law define a cosmetic?

The Federal Food, Drug, and Cosmetic Act (FD&C Act) defines cosmetics by their intended use, as "articles intended to be rubbed, poured, sprinkled, or sprayed on, introduced into, or otherwise applied to the human body...for cleansing, beautifying, promoting attractiveness, or altering the appearance" [FD&C Act, sec. 201(i)]. Among the products included in this definition are skin moisturizers, perfumes, lipsticks, fingernail polishes, eye and facial makeup preparations, shampoos, permanent waves, hair colors, toothpastes, and deodorants, as well as any material intended for use as a component of a cosmetic product.

How does the law define a drug?

The FD&C Act defines drugs, in part, by their intended use, as "articles intended for use in the diagnosis, cure, mitigation, treatment, or prevention of disease" and "articles (other than food) intended to affect the structure or any function of the body of man or other animals" [FD&C Act, sec. 201(g)(1)].

How is a product's intended use established?

Intended use may be established in a number of ways. Among them are:

- **Claims stated on the product labeling, in advertising, on the Internet, or in other promotional materials.** Certain claims may cause a product to be considered a drug, even if the product is marketed as if it were a cosmetic. Such claims establish the product as a drug because the intended use is to treat or prevent disease or otherwise affect the structure or functions of the human body. Some examples are claims that products will restore hair growth, reduce cellulite, treat varicose veins, or revitalize cells.
- **Consumer perception, which may be established through the product's reputation.** This means asking why the consumer is buying it and what the consumer expects it to do.
- **Ingredients that may cause a product to be considered a drug because they have a well known (to the public and industry) therapeutic use.** An example is fluoride in toothpaste.

This principle also holds true for essential oils in fragrance products. A fragrance marketed for promoting attractiveness is a cosmetic. But a fragrance marketed with certain "aromatherapy" claims, such as assertions that the scent will help the consumer sleep or quit smoking, meets the definition of a drug because of its intended use.

How are the laws and regulations different for cosmetics and drugs?

The following information is not a complete treatment of cosmetic or drug laws and regulations. It is intended only to alert you to some important differences between the laws and regulations for cosmetics and drugs in the areas

of approval, good manufacturing practice, registration, and labeling. You should direct questions regarding laws and regulations for drugs to FDA's Center for Drug Evaluation and Research (CDER).

How approval requirements are different

FDA does not have a premarket approval system for cosmetic products or ingredients, with the important exception of color additives. Drugs, however, are subject to FDA approval. Generally, drugs must either receive premarket approval by FDA or conform to final regulations specifying conditions whereby they are generally recognized as safe and effective, and not misbranded. Currently, certain -- but not all -- over-the-counter (OTC) drugs (that is, non-prescription drugs) that were marketed before the beginning of the OTC Drug Review (May 11, 1972) may be marketed without specific approval pending publication of final regulations under the ongoing OTC Drug Review. Once a regulation covering a specific class of OTC drugs is final, those drugs must either -

- Be the subject of an approved **New Drug Application (NDA)** [FD&C Act, sec. 505(a) and (b)], or
- Comply with the appropriate **monograph**, or rule, for an OTC drug.

What do these terms mean?

- An **NDA** is the vehicle through which drug sponsors formally propose that FDA approve a new pharmaceutical for sale and marketing in the U.S. FDA only approves an NDA after determining, for example, that the data are adequate to show the drug's safety and effectiveness for its proposed use and that its benefits outweigh the risks. The NDA system is also used for new ingredients entering the OTC marketplace for the first time. For example, the newer OTC products (previously available only by prescription) are first approved through the NDA system and their 'switch' to OTC status is approved via the NDA system.
- FDA has published **monographs**, or rules, for a number of OTC drug categories. These monographs, which are published in the Federal Register, state requirements for categories of non-prescription drugs, such as what ingredients may be used and for what intended use. Among the many non-prescription drug categories covered by OTC monographs are -
    - acne medications
    - treatments for dandruff, seborrheic dermatitis, and psoriasis
    - sunscreens

How good manufacturing practice requirements are different

Good manufacturing practice (GMP) is an important factor in assuring that your cosmetic products are neither adulterated nor misbranded. However, no regulations set forth specific GMP requirements for cosmetics. In contrast, the law requires strict adherence to GMP requirements for drugs, and there are regulations specifying minimum current GMP requirements for drugs [Title 21 of the Code of Federal Regulations (CFR), parts 210 and 211]. Failure to follow GMP requirements causes a drug to be adulterated [FD&C Act, sec. 501(a)(2)(B)].

How registration requirements are different

FDA maintains the Voluntary Cosmetic Registration Program, or VCRP, for cosmetic establishments and formulations [21 CFR 710 and 720]. As its name indicates, this program is voluntary. In contrast, it is mandatory for drug firms to register their establishments and list their drug products with FDA [FD&C Act, sec. 510; 21 CFR 207].

How labeling requirements are different

A cosmetic product must be labeled according to cosmetic labeling regulations. See the Cosmetic Labeling Manual for guidance on cosmetic labeling. OTC drugs must be labeled according to OTC drug regulations, including the "Drug Facts" labeling, as described in 21 CFR 201.63. Combination OTC drug/cosmetic products must have combination OTC drug/cosmetic labeling. For example, the drug ingredients must be listed alphabetically as "Active Ingredients," followed by cosmetic ingredients, listed in order of predominance as "Inactive Ingredients."

And what if it's "soap"?

Soap is a category that needs special explanation. That's because the regulatory definition of "soap" is different from the way in which people commonly use the word. Products that meet the definition of "soap" are exempt from the provisions of the FD&C Act because -- even though Section 201(i)(1) of the act includes "articles...for cleansing" in the definition of a cosmetic -- Section 201(i)(2) excludes soap from the definition of a cosmetic.

How FDA defines "soap"

Not every product marketed as soap meets FDA's definition of the term. FDA interprets the term "soap" to apply only when --

- The bulk of the nonvolatile matter in the product consists of an alkali salt of fatty acids and the product's detergent properties are due to the alkali-fatty acid compounds, and
- The product is labeled, sold, and represented solely as soap [21 CFR 701.20].

If a cleanser does not meet all of these criteria...

If a product intended to cleanse the human body does not meet all the criteria for soap, as listed above, it is either a cosmetic or a drug. For example:

If a product --

- consists of detergents or
- primarily of alkali salts of fatty acids and
- is intended not only for cleansing but also for other cosmetic uses, such as beautifying or moisturizing,

it is regulated as a cosmetic.

If a product --

- consists of detergents or
- primarily of alkali salts of fatty acids and
- is intended not only for cleansing but also to cure, treat, or prevent disease or to affect the structure or any function of the human body,

it is regulated as a drug.

If a product --

- is intended solely for cleansing the human body and
- has the characteristics consumers generally associate with soap,
- does not consist primarily of alkali salts of fatty acids, it may be identified in labeling as soap, but it is regulated as a cosmetic.

Exhibit E

Directions & Uses: simple instructions regarding how to use the product and the ways in which it can be used. Avoid medical and health-related claims, such as "Agent cicatrisant en cas de plaies et brûiures."

Ingredients: list all ingredients in the product from most abundant to least abundant.

Bar code: Only of concern for the U.S distributor and usually only for large quantities. Not needed at this time.

Made by: "Handmade in Mali" with contact information

Distributed by: The name of the US Distributor along with address including city, state and zip code.

Above is an example o a typical label on the back of a non-medicinal cosmetic or soap product. All text should be clearly printed in English following the above guidelines. In addition to "directions and uses", "ingredients", "made by", and "distributed by" an accurate measure of volume (oz) and weight (g) should be listed (NT. WT.). The label of a 100% shea product sold in the United States may read as follows:

Directions and Uses: Apply and massage into surface of skin to moisturize dry areas
Ingredients: Shea oil
Handmade in Mali by Coprokazan. ugfz@hotmail.com www.coprokazan.org
Distributed by: XYZ Distributor. Minneapolis, MN, 55419 (insert real distributor name)
NT WT. 1.75oz (50g)

Appendix 6 - Business Students' Profiles and Reflections:

Business Students' Profiles

After interviewing 6 MBA students, 2 students were selected based on their references, interests and the interview. Although neither student was following an accounting path, both students had completed the full set of core classes including Financial and Managerial Accounting, Finance, Marketing, Economics, Operations, Marketing Research, Organization Behavior, and Statistics. Both students indicated a significant interest in working in the development area. Mollie Mikl had experience working in financial services and was very interested in micro-financing. John Kamman had a MS in biology with an emphasis on ecology and conservation and was very interested in eventually working for an NGO. In addition, John had experience as a resident biologist in Costa Rica working with sea turtle research.

Fall Reading Schedule

- Accounting content – 3 meetings of 2 hours each
    - o International rules
    - o Government/Not for profit
    - o COSO and Project discussion
- Development content
    - o Business readings (Confessions of an economic hit man, The end of poverty, Banker to the poor, Three Cups of Tea, The Blue Sweater) – (2 meetings of 2 hours each).
    - o Group readings (3 meetings with entire Mali group / 1.5 hour each)
- Planning
    - o Project planning (on-line threaded discussion)
    - o Group planning (1-2 meetings – 1.5 hour each)

The Fall schedule was designed to give students some understanding of accounting in foreign countries and in a governmental or Not for Profit organization. We also discussed the importance of controls within an organization and a structure for ensuring adequate controls.

In addition, we discussed books that presented differing ideas about the economics of development. Confessions of an Economic Hit Man details the career of an economist who helped develop plans for large-scale economic development. He argues that such work actually hurt the countries in which it took place. The End of Poverty outlines a newer approach to large-scale economic development designed to help alleviate some of the issues that create extreme poverty. It argues that we can eliminate extreme poverty by a concerted world-wide effort – the Millenium Project. The other three books address small-scale development more akin to the "Farmer First" idea. Banker to the Poor outlines how small scale loans – "microfinance" – can help individuals escape dire poverty. This story outlined the beginnings of the microfinance movement – a method that enables individuals themselves to break the cycle of extreme

poverty. The Blue Sweater takes financing to a little higher level. The author describes the rise of investment funds whose goal is to help business develop in ways that address dire poverty. The idea is that socially conscious investors will provide funds. The fund manager will then find projects in developing countries that can be helped to become independent businesses. Lastly, Three Cups of Tea is the story of one man who wanted to build one school in a village in Pakistan. The idea mushroomed into an organization building many schools in Pakistan villages.

Excerpts from their reflective papers:

One aspect of the trip that I kept in mind throughout was that the purpose of our trip was, first and foremost, education. Any time that I found myself frustrated by the obstacles in route to actual help or development, I was encouraged by the overwhelming success of this primary purpose; we all learned an amazing amount. As a business student in Mali, the lessons from this course can be loosely categorized into four main take-aways: communication issues, cultural differences, difficulty of development projects, and hands-on business practice lessons.

First, the most obvious lesson that stood out to all students was the communication difficulties that we all encountered. In gathering data for the cost analysis that we were carrying out, we needed to ask questions in units that were potentially foreign (Kg & Hectares), through 2-3 translations. This game of telephone proved incredibly frustrating and unproductive at times. Also, during the initial shea meeting with the cooperative the entire conversation needed to be translated from French to English and back with ample room for miscommunication and need for clarification. The body language, tones, cultural cues were completely lost on what otherwise was a standard business transaction. It added a layer of complication to an already complicated meeting.

Second, communication problems extended beyond solely getting business done through language barriers, but cultural barriers as well. One moment that, to me, represented the difficulties that we encountered as cultural barriers to clear communication happened during the sociology study. In an attempt to get a handle on the costs and profits for farmers growing garlic, we asked some broad questions about the difficulties that they encounter. While most farmers stated that onions were clearly more difficult than garlic - they required more water, more labor, more fertilizer- one farmer explained the cultural difficulties associated with growing garlic. The eldest son is in charge of harvesting and selling garlic, no one ever has a firm grasp on how much he has harvested or how much he has sold them for. There is ample room for embezzlement. These sorts of cultural difficulties are nearly impossible to quantify and provide problems when taking a broad approach to a cost analysis. Perhaps growing garlic is easier, but it can cause many more family problems than growing onions. These sorts of cultural differences made it clear to me that there are variables at play beyond my capacity to encompass. Doing business abroad takes in all of the complications of domestic business plus an “unknown” factor that could unexpectedly emerge at any moment. This, to me, reaffirms the importance of having trusted individuals raised in that environment present to act as a cultural bridge.

Third, there were lessons from this trip that were ones not unique to our presence in Mali, but no less valuable. The cost analysis was a hands-on application of managerial accounting tools. Though the data we received was far from accurate, the model was sound and developed in a real world setting. It was rewarding to successfully implement the lessons learned from the classroom. Similarly, assembling a research report on export from a land-locked country was a valuable lesson in international business, whether valuable to the recipient or not. The final lesson learned, though unexpected, was analysis and formation of a business plan. After we received ABC's Shea business plan, it was fairly clear that vast revisions were in order. This observation is one that I don't think I would have been capable of making before enrolling in the MBA program. Learning to use "Business Plan Pro" solidified my current understanding of what is necessary to create an effective plan and nicely complements the coursework through the program.

Fourth, we all learned, in a very intimate way, the difficulties associated with development in poor countries that are foreign to our eyes. When the problems of cultural differences, language barriers, good intentions and lack of resources come together, a formidable obstacle to development is placed in front of any real progress. While these problems certainly presented themselves in our trip to Mali, the ideas that were at the foundation of our trip, I think, are sound practices capable of overcoming these obstacles when implemented properly.

In short, the trip was an amazing experience full of eye-opening moments about business, culture, communication and development. While there were some frustrations and obstacles en route to fulfilling the project, the lessons learned, hopefully, will help with future business ventures, domestically and internationally. A potato evaporative cooler may not be built in the coming years, and Shea export may be delayed by lack of follow-through on the Malian side, but the lessons learned by all students involved will, I hope, benefit the world in immeasurable ways through the entirety of our careers.

An initial feeling I had on the trip was the instant fear of mosquitoes once I stepped onto the continent. Never in my life have I been more intent on killing every mosquito in my sight. The fear of malaria is real; however, I'm sure we as Americans tend to overact to the threat as well. I found myself being very paranoid about the bugs. Along with these thoughts, I started thinking about malaria and posing the following question in my head: if an American city uprooted itself and planted itself in Bamako's location, how long would it take for malaria to be completely irradiated? I really don't think it would be long. We have the education to understand the seriousness of the disease, the medical personnel to treat it, and the infrastructure to prevent it through air conditioning, bed nets, etc. It is a relatively simple problem, and yet the continent has struggled with it for centuries. There are so many hurdles that would need to be overcome in Mali now to irradiate malaria, yes, but it is still sad to see a lack of progress in that regard.

As we sat in a meeting one day with Coprokazan, the shea butter distributors, a man came by selling calculators. That brief image caught my attention and opened my eyes to the extremely different distribution system that is in place in Mali. If a business man wants to buy a calculator, he does not go to the local store to pick one up. Instead he waits for the man who sells them to walk by or find out through relationships who knows the man who sells calculators and then purchases one from him directly. This is a completely different way of bringing products to the market. It would completely change how a company would need to market and distribute a new product in Mali. It has a more dispersed, ground distribution system. I would suspect this would pose many challenges for a US company and also add some added costs for doing business. If that were the case, I could understand why many companies are reluctant to move into Africa. Not only is the distribution system different, it is complex and gaining economies of scale would be difficult.

In that same vein, I better understand that is extremely imperative to see and understand a foreign market before trying to market a product there. A person cannot infer how another country works based on how the US operates, even regarding simple things and things we take for granted. For example, Africans live outdoors. This was a new idea to me as I watched Africans do everything outside from watching a soccer game, cooking, and washing clothes to welding and sawing wood. Their business and lives all takes place on the roadside. So without having this knowledge, a person might try to sell a product to Mali that they would have absolutely no use for: say a shelving unit for tools. This product would never work because usually there are no walls near the working area and also the product would need to be made to whether through the outdoor elements. It would take ten minutes driving the streets of Mali to make this connection; however, I don't think this always happens when people in the US try to market products to other countries. I have come to a much better understanding of how I would go about selling a product in another country in the future.

Mali is predominantly run as a cash-based society. Credit is rarely used. This is most evident by the houses in Mali. Everywhere you go there are half finished houses. This is because the people typically do not take out a loan to finance their home. Instead, they pay for their home room by room as they can accumulate the funding to do so. This system is exactly the opposite of ours in the US where we take out a large loan to build our homes up front and work to repay the loan the rest of our lives. In the same way, it is harder for businesses in Mali to obtain initial financing and to explode into the market. Building a business must be accomplished at a slower pace. Even for someone to want to invest in a machine for their business, they would first have to save the capital to do so. This may take a long time, and meanwhile the company is earning lower profits than it could with the machine. Although there are positive aspects to the cash-based system such as no debt and less risk, the system also slows growth. The cash-based aspect of Mali definitely changes the way things are run.

Another aspect of society that was different than in the US was regarding gender roles. It was interesting to see the dynamic between men and women in the Malian society. It was apparent that men still have more rights than women and appear to be aggressive at times. For example, men typically are the only

ones that drive, only they can typically file for a divorce, and they can also take more than one wife. Although the women are very strong and powerful, as mentioned earlier, there are definitely rights they appear to lack in comparison to men. It was unclear to me who controlled the purchasing power in a Malian family. I would suspect the women have less control than American women; however, I am not sure. Either way, it would be important to understand this dynamic before selling a product in the country. In addition, the fact that women have fewer rights also slows growth. A woman with a great business plan and intelligence may never have the opportunity to put her ideas into practice. Whereas here in the US, this woman could start her own business, add a new idea to the marketplace, and earn additional income.

Switching topics somewhat, many people in the US have negative attitudes toward the government in general. While I completely understand their concerns and realize our government is far from perfect, this trip reminded me just how important having at least a minimal, efficient government is. I think sometimes we take this for granted in the US. A well run government is needed not only to establish infrastructure but to provide a base for markets to flourish. For example, dogs in the US in cities need to be given a rabies shot. The rabies identification number is then placed on a dog tag, and if a dog is found to not have a collar, they are brought to a dog pound. In Mali, dirty and ravenous dogs wander the street. Even this small thing is a health hazard and a hindrance to society. Now on a much larger scale, there is a lack of a sewer system, safe roadways, and electricity. All of these things need to be in place for trade, distribution, and growth to happen. I believe there is a necessary role of government to make sure these basics are in place so people are allowed to achieve growth. This point of view coincides with the readings we did by Jeffery Sachs. Although I tend to prefer a bottom-up approach, there is something to say for the top-down approach as well. It has its place in development. I think the trick is to find the right balance between infrastructure development and individual growth incentives.

An overriding theme of my stay is a complete wonderment of how "Africa" everything is. The first few days we were in Mali my mind was on overload. I wanted to capture every single sight I saw: a boy rolling a tire with a stick, women carrying bananas on their head, women carrying babies on their back, the marketplace, chickens being stored in stick boxes, men huddled around a TV watching a soccer game at night, and the brightly colored prints that dot the country wherever you go. My experience in Mali was very much the quintessential Africa I had seen in pictures, albeit a bit drier. It was so picturesque that I wanted to capture every moment in film. This is a difficult task as the people here, especially in the larger cities, do not like to have their picture taken. The children are a different story. They will beg for you to take their picture so they can get a glimpse of what they look like through the lens. Either way, my point is one of the biggest insights I will take with me is just how beautiful, unique, and African the land really is. Although the land is filled with poverty and fewer opportunities, it is also full of a rich and vibrant way of life.

After having stayed in the capital of Bamako for a few days, our group headed to a tiny village in the cliffs called Borko. My experience in Borko was the best part of the trip. I much prefer the small village life and culture to that in the larger cities. The people in Bamako seem harsher, and I feel more oppression

and strain when I am here. The people in Borko, on the other hand, seem to be more content, although they have a lower average income. The village of Borko is located in an oasis in a valley surrounded on three sides by red, rocky mountains. The scene is absolutely breath-taking. The vast majority of villagers earn their income through agriculture. The men typically farm, and the women spend their days thrashing wheat, washing clothes, carrying water and firewood, cooking, and cleaning the house. The children also tend to chores in between their school schedule. The community has a sense of order, although at first glance it may appear to be chaos. There is a mayor and a village elder who oversee many of the village's resources and problems.

The people in general seem to be very content with their lives in Borko. The children are happy and fascinated with the strange Americans living in their village. The men and women seem to have some free time in the afternoons to talk and walk leisurely with one another. So, on one hand, the village life is extremely difficult and strenuous, but on the other hand, it is beautiful and peaceful. Many of the children have swollen bellies, and it appears to be from a lack of nutrition. There is also an extreme lack of medicine. If a person falls ill, it is extremely detrimental to their lives. Not only will it take them away from their work, they may not be able to recover if the sickness is severe. The balance of living life on the edge reminded me very much of poverty in the US. Although poverty looks completely different in Minneapolis, there are some similarities to the poverty in Borko. Both groups contain people living on the margins. One illness in both cases can cause a person's life to completely fall apart. In the US a loss of a job can easily get a person evicted if they are living paycheck to paycheck. In the same way, one small bump in life can easily and quickly pull someone's life off track, both in the US and Borko. I was surprised to find that similarity.

Reading List:

Group Readings:

Ayittey, G.B.N. 2005. Africa unchained.: The blueprint for Africa's future. Palgrave, Macmillan. N.Y.

Calderisi, R. 2006. The trouble with Africa: Why foreign aid isn't working. Palgrave, Macmillan. N.Y..

Easterly, W. 2006. The white man's burden: Why the West's efforts to aid the rest have done so much ill and so little good. Penguin Press, New York.

Business Readings:

Mortenson, G and David Relin. 2006. Three cups of Tea: One man's mission to promote peace…One school at a time. Penguin Books.

Novogratz, Jacqueline. 2009. The Blue Sweater: Bridging the gap between rich and poor in an interconnected world. Rodale Inc. N.Y.

Perkins, John. 2004. Confessions of an economic hit man. Berrett-Koehler Publ Inc

Sachs, J.D. 2005. The end of poverty: Economic possibilities for our time. Penguin Books.

Yunus, M. 2003. Banker to the Poor. Public Affairs, member of Perseus Books Group, NY.

Web resources:

- Rural Finance Learning Centre http://www.ruralfinance.org/servlet/CDSServlet?ctn=1780&org.fao.waicent.cds.of.KOTTabBar.0.kot=documents&language=en
- World Bank – doing business in Mali http://www.doingbusiness.org/ExploreEconomies/?economyid=121
- Enterprise Risk Management – Integrated Framework Executive Summary can be downloaded from: http://www.coso.org/publications.htm