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FOREIGN DIRECT INVESTMENT IN BLANTYRE, MALAWI: OPPORTUNITIES AND CHALLENGES

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The Millennium Cities Initiative (MCI) is a project of The Earth Institute at Columbia University, directed by Professor Jeffrey D. Sachs. It was established in early 2006 to help sub-Saharan African cities achieve the Millennium Development Goals (MDGs).

As part of this effort, MCI helps the Cities to create employment, stimulate enterprise development and foster economic growth, especially by stimulating domestic and foreign investment, to eradicate extreme poverty – the first and most fundamental MDG. This effort rests on three pillars: (i) the preparation of various materials to inform foreign investors about the regulatory framework for investment and commercially viable investment opportunities; (ii) the dissemination of the various materials to potential investors, such as through investors’ missions and roundtables, and Millennium Cities Investors’ Guides; and (iii) capacity building in the Cities to attract and work with investors.

The Vale Columbia Center on Sustainable International Investment promotes learning, teaching, policy-oriented research, and practical work within the area of foreign direct investment, paying special attention to the sustainable development dimension of this investment. It is a joint center of Columbia Law School and The Earth Institute at Columbia University.

A separate MCI working papers series on the social sector is also available.

For more information, please refer to the MCI website at: <http://www.earth.columbia.edu/mci/> and the Vale Columbia Center website at: <http://www.vcc.columbia.edu/>.

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Table of Contents

Table of Contents.....	3
Acknowledgements	5
Table of Figures.....	6
Acronyms and Abbreviations	7
Currency and Units.....	8
Executive Summary.....	9
I. Mandate and Investment Evaluation Framework.....	11
1. Mandate	11
2. Methodology.....	11
II. Blantyre City Overview	13
Blantyre City Snapshot	13
Blantyre City Economic Profile	14
Blantyre City Political Profile.....	14
III. Industry Assessments.....	16
1. Cotton and Textiles Industry Analysis.....	16
Industry Overview.....	16
Value Chain Analysis.....	17
Sub-sector Analysis: Cotton/Textiles/Garments	17
Opportunities.....	19
Constraints	20
Impact and Feasibility Assessment	21
2. Cassava Industry Analysis	22
Industry Overview.....	22
Value Chain Analysis.....	24
Sub-Sector Analysis: Cassava Processing.....	25
Opportunities.....	26
Constraints	26
Impact and Feasibility Assessment	27
3. Pigeon Pea Industry Analysis	28
Industry Overview.....	28
Value Chain Analysis.....	29
Sub-Sector Analysis: Pigeon Pea Processing	29
Opportunities.....	30
Constraints	30
Impact and Feasibility Assessment	30
4. Chili Industry Analysis	31
Industry Overview.....	31
Value Chain Analysis.....	33
Sub-sector Analysis: Chili Processing	33
Opportunities.....	34
Constraints	34
Impact and Feasibility Assessment	34
5. Groundnuts Industry Analysis	35
Industry Overview.....	35
Value Chain Analysis.....	37
Sub-Sector Analysis: Groundnuts Processing.....	37
Opportunities.....	37
Constraints	38
Impact and Feasibility Assessment	39
6. Macadamia Nuts Industry Analysis	39
Industry Overview.....	39
Value Chain Analysis.....	40
Sub-Sector Analysis: Macadamia Nuts Processing.....	41

Opportunities.....	41
Constraints	41
Impact and Feasibility Assessment	42
IV. Conclusion and Recommendations	43
Identify Investors	43
Advocate for the Alleviation of Supply-side Bottlenecks	44
Support Institutional Capacity Building of the Key FDI Institutions.....	44
Establish Stronger Linkages between MVP and MCI.....	44
Encourage Partnerships with Development Agencies and NGOs.....	44
Appendix I. Sectors with Limited Investment Potential	45
1. Banking Industry Analysis.....	45
Industry Overview.....	45
Opportunities.....	45
Constraints	46
2. Coffee Industry Analysis	46
Industry Overview.....	46
Value chain	47
Opportunity	47
Constraints	48
3. Dairy Industry Analysis	48
Industry Overview.....	48
Value Chain	49
Opportunity	50
Constraints	50
4. Tea Industry Analysis	51
Industry Overview.....	51
Opportunity	54
Constraints	54
5. Telecommunications Industry Analysis.....	54
Industry Overview.....	54
Opportunity	56
Constraints	56
6. Tourism Industry Analysis.....	56
Industry Overview.....	56
Opportunity	58
Constraints	58
Appendix II. Foreign Direct Investment in Malawi.....	59
Appendix III. Investment Climate/ Opportunities/ Constraints	61
Investment Climate	61
Opportunities.....	61
Constraints	62
Appendix IV. Bibliography	64

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Table of Figures

Figure 1: Investment Evaluation Framework	11
Figure 2: Map of Malawi.....	13
Figure 3: Blantyre City Snapshot	14
Figure 4: Exports to the United States (US\$, thousands)	16
Figure 5: Cotton Hectarage and Production (2006-2007 Estimates)	18
Figure 6: Malawi's Main Exports by Value (2000-2006)	18
Figure 7: Cotton Area, Yield, and Production Trends (1985 – 2007).....	19
Figure 8: Global Cassava Production	23
Figure 9: Cassava Production in Comparison to Other Crops in Malawi.....	24
Figure 10: Pigeon Pea World Production (in tons).....	29
Figure 11: Production Supply of Pigeon Peas in Malawi	29
Figure 12: Chili Production Trend in Malawi.....	32
Figure 13: 2005 Malawian Commodity Price Comparison (US\$/ton)	32
Figure 14: Blantyre Chili Production Estimates	33
Figure 15: Blantyre Groundnuts Production Estimates 2002-2003 to 2006-2007.....	36
Figure 16: Linkages with the Millennium Village Project	39
Figure 17: World Macadamia Nut Production and Exports	40
Figure 18: Number of Licensed Institutions in Malawi	46
Figure 19: Interest Rates.....	46
Figure 20: Milk Production Estimates	49
Figure 21: Milk Consumption per Capita in Malawi (kg)	49
Figure 22: World and Malawi Tea Price Trends	52
Figure 23: Largest Affiliates of Foreign Transnational Companies in Malawi, 2004	59
Figure 24: Malawi's "Doing Business" Report Ranking, 2008.....	61

Acronyms and Abbreviations

ADMC	Agricultural Development and Marketing Corporation
ACDI/VOCA	Agricultural Cooperative Development International Volunteers in Overseas Cooperative Assistance
AGOA	African Growth and Opportunity Act
BASFA	Balaka Area Smallholder Farmers' Association
CAMAL	Coffee Association of Malawi
CBD	Central Business District
CDA	Cotton Development Association
CMV	Cassava Mosaic Virus
COMESA	Common Market for Eastern and Southern Africa
DFID	Department for International Development
ELISA	Enzyme-linked Immunosorbent Assay
EPD	Economic and Political Development
EPM	Eastern Produce Malawi
EPZ	Export Processing Zone Act
EU	European Union
FAO	Food and Agriculture Organization
FDA	Food and Drug Administration
FDI	Foreign Direct Investment
GPM	Groundnut Pigeon Pea Multiplication
GSB	Growing Sustainable Business
HIV/AIDS	Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome
ICRISAT	International Crops Research Institute for the Semi-Arid Tropics
ISP	Internet Service Provider
HPLC	High Performance Liquid Chromatography
MACRA	Malawi Communications Regulatory Authority
MASH	Malawi Association of Spice and Herbs
MBGs	Milk Bulking Groups
MBS	Malawi Bureau Standard
MCI	Millennium Cities Initiative
MDI	Malawi Dairy Industries
MDGs	Millennium Development Goals
MGDS	Malawi Government Development Strategies
MIPA	Malawi Investment Promotion Agency
MMM	Malawi Milk Marketing
MoAFS	Ministry of Agriculture and Food Security
MRFC	Malawi Rural Finance Company Limited
MSAs	Milk Shed Areas
MTL	Malawi Telecommunications Limited
MVP	Millennium Villages Project
NGO	Non-Governmental Organization
NASFAM	National Smallholder's Farmer's Association Malawi
NASDEC	NASFAM Development Corporation
NASSCENT	NASFAM Centre for Development Support
NASCOMEX	NASFAM Commodity Marketing Exchange
NSO	National Statistics Office
NORAD	Norwegian Agency for Development Cooperation
NSSD	National Strategy for Sustainable Development
OIBM	Opportunity and Investment Bank of Malawi

RBM	Reserve Bank of Malawi
SADP	Smallholder Agribusiness Development Project
SARRNET	South African Root Crops Research Network
SCFT	Smallholder Coffee Farmers Trust
SHMPA	Southern Highlands Milk Producers Association
SIPA	School of International and Public Affairs
SME	Small and Medium-sized Enterprise
TNM	Telecom Networks Malawi
UNDCF	United Nations Capital Development Fund
UNDP	United Nations Development Program
UK	United Kingdom
US	United States of America
USAID	United States Agency for International Development
WSSD	World Summit on Sustainable Development
ZISFA	Zikometso Smallholder Farmers Association

Currency and Units

MK	Malawi Kwacha (1 US Dollar = 137 MK, as of February 1, 2009) ¹
US\$	US Dollar
°F	Fahrenheit
°C	Celsius
Ha	Hectare (1 ha = 10,000 square meters)
Kg	Kilogram (1 kg = 2.2 pounds)
mm	Millimeter (1/25 inch)
m ³	Cubic meters
ppb	Parts per billion

¹ Oanda.com. <http://www.oanda.com>.

Executive Summary

The Earth Institute at Columbia University launched the Millennium Cities Initiative (MCI), an urban counterpart to the Millennium Villages Project (MVP), to assist nine mid-sized cities across sub-Saharan Africa in achieving the Millennium Development Goals (MDGs). MCI provides research and policy analysis to the cities in order to attract foreign direct investment (FDI). Increased FDI flows create employment opportunities by fostering local enterprise development and sustainable economic growth. In addition, MCI is helping the Millennium Cities to carry out needs assessments in a number of social sectors. The data from these assessments will enable MCI to generate integrated City Development Strategies to help each city meet the MDGs.

Currently, the principal destination for FDI in Malawi is agriculture, most notably in tobacco and sugar. According to the World Investment Report 2007, Malawi had US\$30 million of FDI inflow in 2006, compared to US\$7 million in 2003. Other major sectors of investment include telecommunications, manufacturing, tourism, and mining. The bulk of FDI inflows come from the UK, the US, and South Africa.

Malawi has been relatively politically stable since its independence in 1964. The transition from one-party rule to a multi-party democracy has been largely peaceful. The Government encourages both domestic and foreign investors to establish and own business enterprises in most sectors of the economy. Malawi is party to numerous multilateral and regional trade agreements including the Common Market for Eastern and Southern Africa (COMESA), Southern African Development Community (SADC), the US African Growth and Opportunities Act (AGOA), and the Cotonou Agreement/Everything But Arms (EBA) Initiative. Additionally, bilateral trade agreements exist with South Africa, Zimbabwe and Mozambique, and a customs agreement with Botswana. A number of tax incentives in Malawi are enshrined in the main tax legislation that includes the Customs and Excise Act, the Income Tax Act and the Export Processing Zones (EPZ) Act.

While Malawi's investment climate has improved during the last decade, the country is still facing a number of major challenges. In addition to its landlocked position, which can result in high transport costs of more than 30 percent of the country's total import bill, Malawi's poor power and water infrastructure also impedes the attraction of investment. In 2004, companies on average suffered power disruption of 50 days, compared to 48 days in Tanzania and 15 days in Zambia. Further, interest rates are among the highest in Africa. According to the IMF, the 2009-projected lending rate is 25.0% compared to 13.5% in South Africa. The cost of finance is a major obstacle for firms in Malawi.² Malawi ranked 118th (out of 180 countries) in the 2007 Transparency International Corruption Perceptions Index. President Bingu Wa Mutharika has made the fight against corruption a top priority.

Using information gathered from literature reviews and field visits, the authors assessed investment opportunities across eleven industries: cassava, chili, coffee, pigeon pea, cotton, macadamia nuts, tea, dairy, banking, telecom, and tourism.

Using the investment evaluation framework described in Section I, the authors identified the textile manufacturing sector as having considerable investment potential, distinguished by high impact and feasibility. Investment in this sector is expected to have high positive impacts on employment and productivity, as well as high feasibility measured by demand, supply, enabling market and profitability factors. Currently, garment producers in Malawi are uniquely positioned to benefit from preferential access granted by AGOA. A requirement for locally or regionally sourced raw materials comes into effect in 2012, forcing garment producers to source raw material regionally without a fully developed local

² Economist Intelligence Unit. *EIU DataServices*, <https://eiu.bvdep.com/frame.html>.

textile-manufacturing sector. This will force Malawi to compete with the world's largest garment suppliers on equal ground. Given the lack of textile manufacturing facilities in the country, a significant opportunity exists to invest in textile manufacturing facilities. Investment in this sector would entail a capital investment in an existing company or the establishment of an entirely new textile manufacturing company. In either case, Blantyre is optimally located, serving as the headquarters of two of the country's three cotton ginneries and most garment producers. Mapeto, the country's sole textile producer, is looking to expand its weaving capacities. This represents a unique opportunity to invest in the industry at a time when Malawi still enjoys preferential access to international markets. Alternatively, a new vertically-integrated textile manufacturing operation can be established.

Beyond textile manufacturing, the sole high impact-feasibility sector, the authors identified five medium impact-feasibility sectors. These investment opportunities include the following agricultural value-added products: cassava processing, pigeon pea processing, chili processing, groundnuts processing and macadamia nut processing.

Analyses of industries with limited investment potential are included in Appendix I. The authors also evaluated constraints hampering the growth of each industry.

Considering the aforementioned constraints associated with FDI in general, as well as with individual industries, the authors set forth recommendations for MCI with a view to encouraging FDI in the high impact-feasibility sectors and alleviating the constraints hampering growth in these sectors. These recommendations include the following:

- Identify investors for high impact-feasibility sector investment opportunities;
- Advocate for the alleviation of supply-side bottlenecks;
- Support the institutional capacity building of key agencies, such as the Malawi Investment Promotion Agency MIPA, the Malawi Bureau of Standards (MBS) and the Malawi Export Promotion Council (MEPC);
- Establish stronger linkages between MVP and MCI; and
- Encourage partnerships with development agencies and NGOs for value-added projects.

I. Mandate and Investment Evaluation Framework

1. Mandate

The authors were mandated by MCI to focus on three main objectives:

- To identify viable and feasible investment opportunities in Blantyre;
- To assess the various FDI opportunities that create sustainable economic development in Blantyre;
- To provide MCI with recommendations on programming priorities, by focusing on the types of FDI that offer deep, positive and sustainable impacts on Blantyre’s development goals.

2. Methodology

The key research question to be answered in this working paper is: What viable/feasible investment opportunities exist in the city of Blantyre and which of those can offer sustainable development that can contribute toward the achievement of the MDGs in Malawi? As such, the paper focuses on:

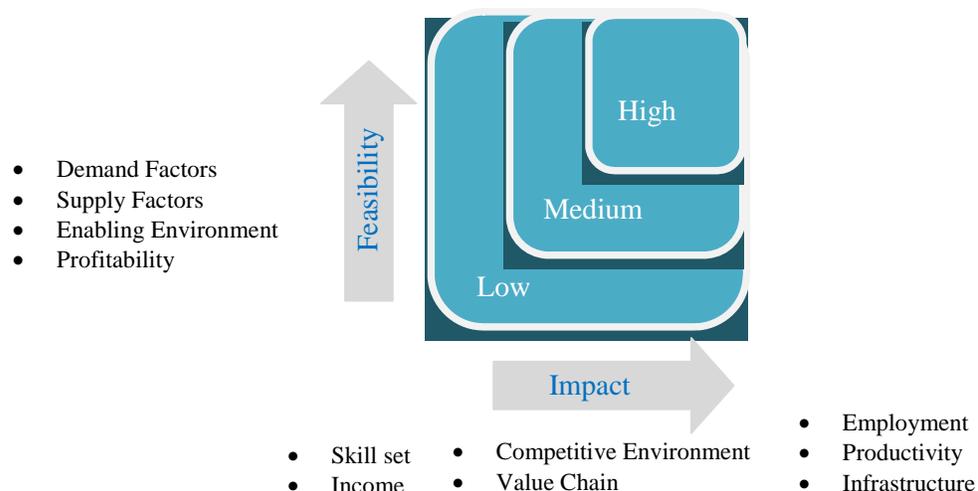
- The analysis of key industries with potential to attract FDI;
- An assessment of key industries from two aspects:
 - The feasibility of FDI in Blantyre, including constraints and opportunities; and
 - The potential impact of FDI, i.e. the various ways in which different types of FDI can positively contribute to Blantyre’s development plans.

The achievement of the above objectives entailed the successful completion of various sequenced, time-bound activities that were executed within the framework of an established methodology.

Investment Evaluation Framework

The authors used an investment evaluation framework to assess the suitability of potential investment opportunities, illustrated by the figure below. This assessment was not based on a particular index or quantitative measure of feasibility and impact; the graph merely serves as a conceptual framework and visual guide when evaluating an investment against others.

Figure 1: Investment Evaluation Framework



Investments were classified according to two criteria: **impact** and **feasibility**. An investment was classified as “High” if it had high scores in both impact and feasibility. “Medium” investments scored relatively lower on the composite measures. An investment was classified “Low” if it was considered highly feasible but had a low impact for development. The same principle was followed if the industry

scored “high” in impact and “low” in feasibility. The difficulty in comparing disparate industries and a dearth of quantitative data necessitated a qualitative evaluation of the sectors.

The **Impact** component of the framework includes the following factors:

- Employment - How much employment will the investment generate?
- Technology transfer (skills) - Will this investment improve the skills of the labor force?
- Income – Which demographic segment will most benefit from the increase in wages derived from this investment?
- Local competitive environment - Does this investment spur competition locally and improve efficiency and productivity in the sector/industry?
- Linkages - Are there any backward or forward linkages that can be made with other industries? Are there any improvements in value chains?
- Spillover effects - What effects will this investment have on other industries or sectors? Will others benefit?
- Infrastructure - Will this investment lead to an improvement in the local infrastructure?
- Sustainability - What are the prospects of this investment's environmental sustainability?

The **Feasibility** component of the framework is comprised of the following factors:

Demand Factors

- Excess demand - Does demand for the good exceed the available supply?
- Demand trend - What does future demand look like?
- Price sensitivity - How will changes in the price of the good affect demand?

Supply Factors

- Technological requirement - Does the technology for the production of the good exist locally or must it be imported? At what cost?
- Supply of qualified labor - Is available labor qualified for the process? Is training required?
- Competitive production cost - Can the good be produced at a competitive cost for the local market? International market?
- Industry structure - How many firms operate in the sector? How will this affect operations?
- Price sensitivity - How will changes in the price of inputs affect production?
- Access to financing - How will access, or the lack thereof, to financing affect operations?

Enabling Environment

- Taxes - What are the taxes like for companies in this sector?
- Tariffs - How will high trade tariffs affect imports of raw materials and exports of finished goods?
- Subsidies - Are there currently any subsidies in this sector/industry that might distort the market?
- Trade agreements - Are there any trade agreements that might benefit this sector/industry? How?
- Domestic policy - Are there any government policies facilitating investment in the sector/industry?
- Infrastructure - How does the existing infrastructure affect the viability of the sector/industry?

Profitability

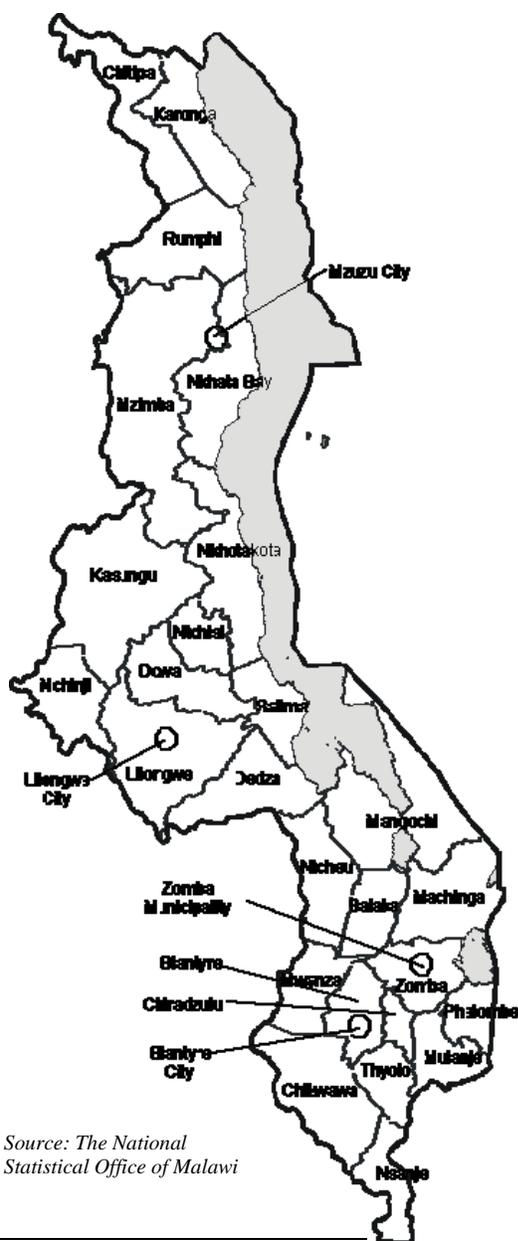
- Payback period - What is the length of time required to recover the cost of an investment, calculated as Cost of Project/Annual Cash Inflow?
- Break-even analysis - What is the number of units that must be sold to produce a profit of zero and recover all associated costs?

II. Blantyre City Overview

Blantyre City Snapshot

Located in the south of Malawi and lying on a central transport route, Blantyre is well-connected to other regions as well as neighboring countries. For the purpose of this working paper, the Blantyre region covers the entire southern region except Mangochi and Zomba (see Figure 2). The following southern districts are included: Mwanza, Neno, Blantyre, Chiradzulu, Thyolo, Mulanje and Phalombe.

Figure 2: Map of Malawi



Source: The National Statistical Office of Malawi

Climate/Rainfall

The city has a tropical continental climate, with light rainfall common during the cold dry season due to moist maritime air. Temperatures are cool, ranging from an average of 13°C (55.4°F) in the cold season to 21°C (69.8°F) during the hottest months, namely September, October and November. The average annual rainfall is 1,122 mm.³

Health

The threat of HIV/AIDS in the city is high with an HIV/AIDS prevalence rate of 21 percent in 2005. There is also a significant threat of cholera during annual rainfalls.⁴ Due to the poor drainage system, malaria remains a major health concern.⁵

Water

Water supply is accessible to 80 percent of the population. The total capacity of piped water is 86,000m³/day against a total demand of 63,100m³/day. The Blantyre Water Board has difficulty meeting current demand, especially during the dry season. Since Blantyre is located on a hill, the city's water supply must be pumped uphill through a pumping system that is old and susceptible to frequent breakdowns. These deficiencies, combined with the fact that old pipes lose up to 50 percent of water carried, make the city's water supply often unreliable and problematic for industries located in Blantyre.

Energy

The electricity grid covers almost the entire city. The local source of electricity is hydro-based, largely generated from the Shire River. Where service is available, there are frequent disruptions, with load shedding occurring regularly due to problems related to

³ Blantyre City Assembly (2007). *Blantyre Urban Structure Plan: Volume 1, Background and Studies Report*, (Blantyre: Blantyre City Assembly).

⁴ Blantyre City Assembly (August 2007). *City of Blantyre Situation Brief*, (Blantyre: Blantyre City Assembly).

⁵ Blantyre City Assembly (2006). *Situation analysis of informal settlements — cities without slums initiative, Final Report*, (Blantyre: Blantyre City Assembly).

low water levels. Only 2-5 percent of the Malawian population has access to electricity, and firewood is the primary source of energy for cooking for the majority.⁶

Figure 3: Blantyre City Snapshot

City Area	Covers a total area of 22,800 hectares of hilly ground.
City Population (2007)	Estimated at 778,000, with a total country population of 13.2 million. ⁷ Blantyre is undergoing rapid population growth due to urbanization.
Employment	57.4% (Unemployed) 38% (Economically active) 10% (Informal) ⁸
Poverty⁹	52% of the population is poor with MK16,165 (US\$118) per year. 46% of households earn less than MK10,029 (US\$73) per year.
Life Expectancy	37 years (38 years for Malawi).
Literacy rate	26.9% with no education. 85.2% lack formal skills.

Source: Blantyre City Assembly (2006). "Situation Analysis of Informal Settlements."

Roads

The city's road network covers a distance of 344 miles, of which 35.5 percent is paved. The road system within the formally developed areas of Blantyre has adequate capacity to accommodate current volumes. However, given the City Assembly's lack of resources, the condition of paved roads is poor.

Blantyre City Economic Profile

Blantyre remains Malawi's commercial capital and largest city. Primary sectors, including agriculture, fishing and mining, comprise a small portion of Blantyre's economy. While the manufacturing industry remains the most important employer, wholesale and retail traders also constitute a significant portion of the city's economy.¹⁰

Blantyre city does not have the autonomy to offer local incentives to foreign investors. Unlike large metropolitan areas in neighboring countries, investment incentives at the city level are almost non-existent. With no statutory authority for the city to act independently, it is unable to make contracts with foreign investors on its own, except to provide local incentives such as tax holidays or city land grants.¹¹ Currently, applications for FDI in the city are centrally managed by government agencies such as MIPA. Poor coordination between key stakeholders, including municipal boards, governmental agencies and service providers, results in the underutilization of scarce resources and uncoordinated planning.¹² Opportunities exist for the Blantyre City Assembly to establish formal communication channels with many of these stakeholders.

Blantyre City Political Profile

Blantyre had elected city councilors until 2004.¹³ The Blantyre City Assembly does not receive much funding from the Government; its only source of income is city taxes on property, the imposition of

⁶ Ibid.

⁷ Malawi Investment Promotion Agency (2007). *Investor's Guide to Malawi 2007*, (Lilongwe: MIPA).

⁸ Blantyre City Assembly (2007). *Blantyre Urban Structure Plan: Volume 1, Background and Studies Report*, (Blantyre: Blantyre City Assembly).

⁹ The Ministry of Economic Planning and Development, National Statistics Office, and The World Bank (2005). *Second Integrated Household Survey 2005*, (Lilongwe: Government of Malawi).

¹⁰ Blantyre City Assembly (2007). *Blantyre Urban Structure Plan: Volume 1, Background and Studies Report*, (Blantyre: Blantyre City Assembly).

¹¹ DLA Piper US LLP (November 2007). *Millennium Cities Initiative: Report on the Regulatory Framework for Foreign Direct Investment, Malawi*, (New York: DLA Piper).

¹² Ibid.

¹³ Blantyre City Assembly (August 2007). *City of Blantyre Situation Brief*, (Blantyre: Blantyre City Assembly).

which requires government approval.¹⁴ While decentralization has taken place in Blantyre in accordance with the Local Government Act of 1998, corruption and financial shortfalls continue to be major challenges for the city.¹⁵

¹⁴ Costly Chanza, Blantyre City Assembly (January 9, 2008). Personal interview.

¹⁵ Tambulasi, Richard I.C. and Happy M. Kayuni (2007). "Opening a New Window for Corruption: An Accountability Assessment of Malawi's Four Years of Democratic Local Governance," *Journal of Asian and African Studies* vol. 42 (2).

III. Industry Assessments

1. Cotton and Textiles Industry Analysis

Industry Overview

The 1950's were a successful decade for the cotton sub-sector in Malawi during which state-controlled prices—set by the country's sole textile manufacturer, the parastatal David Whitehead & Sons (DW&S)—and strong international demand contributed to a peak production of 100,000 tons of cotton per year.¹⁶ Subsequent industrial decline over then next several decades resulted in a mere 14,700 tons of production by 2002-2003.¹⁷ While the privatization and the near collapse of DW&S were the primarily causes for this decline, many other factors such as increasing competition from Asian counterparts, growing trade liberalization, dumping of secondhand clothing, declining farmer productivity, and chronic underinvestment contributed as well. With the help of rising international demand and a successful lending initiative led by two ginners, the cotton sub-sector has witnessed a recent revival, resulting in approximately 58,569 tons of production in 2006.¹⁸

Figure 4: Exports to the United States (US\$, thousands)¹⁹

	2005	2006	2007
Malawi			
Textiles and Apparel:			
Exports to US	22,781	18,187	19,830
Total through AGOA	22,648	18,187	19,830
All Sectors:			
Exports to US	82,444	79,010	69,007
Total through AGOA	65,902	60,908	59,309
Swaziland			
Textiles and Apparel:			
Exports to US	160,987	135,204	135,296
Total through AGOA	159,367	134,423	134,635
All Sectors:			
Exports to US	198,876	155,807	147,963
Total through AGOA	176,117	149,815	141,410
Lesotho			
Textiles and Apparel:			
Exports to US	390,690	387,242	383,566
Total through AGOA	388,452	384,452	379,616
All Sectors:			
Exports to US	403,471	79,010	443,018
Total through AGOA	388,584	60,908	379,617

Source: U.S Department of Commerce.

The post-privatization struggles of DW&S (renamed Mapeto DWSM Ltd. upon acquisition by Mapeto Wholesalers in 2003) led to a disintegration of the entire cotton-textiles-garment value chain, which persists to this day. Consequently, Malawi has been unable to attract much investment into the textile and

¹⁶ K.K. Desai, Knitwear Industries (January 14, 2008). Personal interview.

¹⁷ Coyne, Sarah (September 2004). *Cotton Sub-Sector Draft Report*, (Blantyre: Kadale Consultants).

¹⁸ Estimates from the Malawi Investment Guide and sub-sector stakeholders suggest that production numbers were actually closer to 46,000 tons; See Ministry of Agriculture and Food Security Annual Agricultural Statistical Bulletin 2006/07.

¹⁹ "All Sectors" include textiles and apparel.

garment sub-sectors, lagging behind its regional competitors. While textile and garment production in Swaziland and Lesotho was less than in Malawi fifteen years ago, both countries now export more as a result of strong investment in the sector (see Figure 4).²⁰

A revitalized textile sector would stimulate cotton production, generate employment, and supply much-needed cloth for garment makers. The textile segment of the value chain is in dire need of an investment infusion. This point is of special significance given Malawi's continuing preferential access to the US market enabled by AGOA. To continue benefiting from this agreement, Malawi will need to source its fabric locally or regionally rather than rely on East Asian imports because the provision for sourcing textile materials from non-AGOA countries will expire in 2012.²¹

Value Chain Analysis

In Malawi, the disintegration of the textile production sub-sector has led to a gap in the value chain described below:²²

- 1. Cotton production value chain:** comprised of cotton-growing farmers and ginneries, in which seed cotton is separated into lint (37 percent) and cottonseed (58 percent).²³ While over 95 percent of the lint is exported for spinning—typically the ginning company's home country—a majority of the cottonseed is processed locally into oil for domestic consumers with animal feed as a by-product.²⁴ The four ginners that currently operate in Malawi are Great Lakes Cotton Company (Great Lakes), Cargill (formerly Clark Cotton Malawi), Iponga, and a new entrant, Toleza.
- 2. Textile manufacturing value chain:** consists of the country's sole textile manufacturer, Mapeto, spinning less than 5% of the country's lint into yarn, which is either exported or weaved into loom cloth. The loom cloth is then exported or sold to the local consumer market.
- 3. Domestic garment manufacturing value chain:** comprised of several firms that sell to the domestic market. They buy a very small proportion of their cloth from Mapeto DW&S and import the rest.
- 4. Export garment manufacturing value chain:** comprised of several large firms specially designated as Export Processing Zones. They import all of their material for production, since Malawi does not currently produce the right quality of cloth.

Sub-sector Analysis: Cotton/Textiles/Garments

Cotton ranks as the fourth most important export crop in Malawi after tobacco, tea and sugar. Grown on 60,688 hectares of land, it supports more than 120,000 rural households.²⁵ While the Blantyre area is responsible for only a small proportion of the country's yield (see Figure 5), it lies in close proximity to the Shire Valley, which accounts for nearly half of the country's production.

The recent growth of the cotton sector, as seen in Figure 6 has been largely due to the lending and input subsidy initiatives implemented with the creation of the Cotton Development Association (CDA) in 2002-2003. The CDA, a consortium of the country's key stakeholders in the cotton industry, was spearheaded by the two major cotton ginners—Great Lakes and Cargill—to spur local production. Despite having received the backing of the Government, the association is unable to regulate the industry as a whole and

²⁰ Currently, Lesotho is Africa's biggest exporter of garments to the United States.

²¹ This is the so-called "Double Transformation" requisite in AGOA. The agreement stipulates that by 2012, the cotton must undergo two transformations in the country of origin. For example, yarn could be woven into fabric (first transformation) and then made into a garment (second transformation) to satisfy the requirement.

²² The Privatization Commission. <http://www.privatisationmalawi.org/>.

²³ Assuming losses of around 5%.

²⁴ Agar, Jason (September 2007). *Credit Demand and Supply, Cotton Sector, Malawi*, (Blantyre: Kadale Consultants).

²⁵ Ibid.

represent all of its key players. Given that the current Cotton Act in Malawi is outdated, there is a proposal to revise the act to include the establishment of a National Cotton Council, which would oversee proper planning, research, quality assurance, and marketing and be financed by the levy. However, the Government has yet to approve the proposal, which was originally led by the private sector.²⁶

Figure 5: Cotton Hectareage and Production (2006-2007 Estimates)

Cotton	Hectares (ha)	Production (tons)
Mzuzu	46	29
Karonga	1,777	1,689
Kasungu	1,917	1,745
Blantyre	2,042	2,211
Lilongwe	3,707	3,705
Salima	6,872	6,692
Machinga	18,217	15,570
Shire Valley	26,090	30,181
National	60,673	63,290

Source: Ministry of Agriculture and Food Security.

Figure 6: Malawi's Main Exports by Value (2000-2006)

MK (millions)	2000	2001	2002	2003	2004	2005	2006
Tobacco	14,200.3	18,363.3	17,893.1	24,191.2	22,303.5	31,241.5	55,840.0
Tea	2,235.4	2,461.0	2,827.8	3,481.5	5,132.5	5,937.4	6,737.0
Sugar	2,339.2	3,975.7	2,684.2	10,571.4	7,881.4	5,408.5	6,391.0
Apparel/Garments	797.8	2,018.0	2,464.6	3,858.1	4,795.5	4,995.7	5,525.0
Cotton	438.5	316.6	260.8	483.9	2,224.3	1,847.1	2,054.0
Nuts	239.7	368.2	378.1	1,132.0	1,581.0	1,473.0	1,003.0

Source: NSO/ 2007 Economic Report.

The two major cotton ginners—Great Lakes and Cargill—are headquartered in Blantyre and are subsidiaries of multinationals. Great Lakes' parent company is the UK-based Plexus Cotton Limited, a vertically integrated raw cotton supplier, and Cargill is a subsidiary of Cargill, Inc., an American company specializing in providing food, agricultural, and risk management products and services. Both companies supply most of the lint to their parent companies. Iponga was the only other ginner operating in the country until Toleza from Balaka started its operation in 2008. Despite the recent upward trend in production, the cotton ginneries operate at approximately 30 percent of capacity.²⁷ Given that each ginning machine has a capacity of approximately 20,000 tons/year, Malawi is capable of producing well over 100,000 tons/year of cotton.²⁸ Hence, there is room for a significant increase in smallholder cotton production without the need for additional capital investment on behalf of the ginners.

Textiles

All textile production in the country is manufactured by Mapeto, a former parastatal organization located in Blantyre. Plagued by severe financial difficulties, the company was forced into receivership in 2002 and resumed operations in 2003.²⁹ Yarn production fell from 30 million meters in the early 1980's to 100 thousand meters by 2002. A disruption of the domestic market as a result of severe dumping and smuggling of finished textile goods played a key role in the company's struggles.

²⁶ Duncan Warren, NASFAM (March 12, 2008). Personal interview.

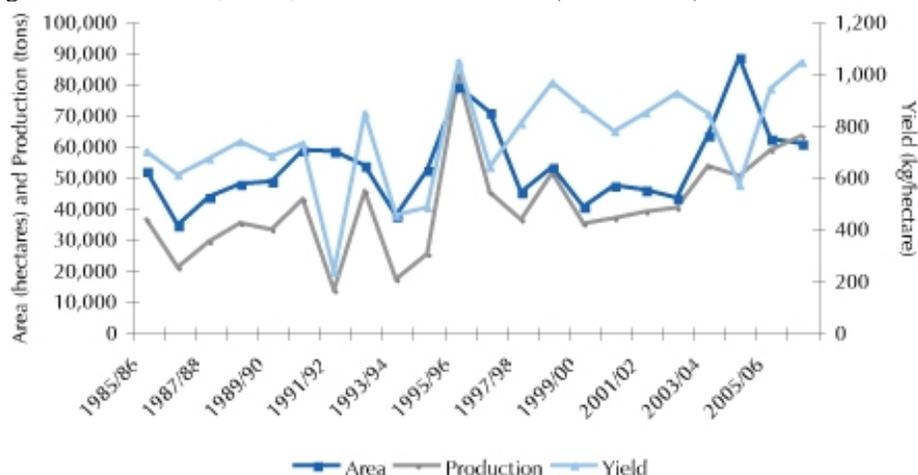
²⁷ Pieter Verster, Great Lakes Cotton Company (January 16, 2008). Personal interview.

²⁸ Ibid.

²⁹ The Regional Trade Center (RATES) (July 2003). *Cotton-Textile-Apparel Value Chain Report Malawi*, (Nairobi: RATES).

Currently, the spinning operations of Mapeto utilize less than 5 percent (1,000-1,500 tons per annum) of the country's domestically-produced lint.³⁰ Furthermore, a small fraction of its yarn and cloth is purchased by the country's domestic garment makers. The rest is exported or sold directly to the consumer market. Since the company is unable to produce high-quality fabrics up to international standards, it does not supply the country's garment exporters.

Figure 7: Cotton Area, Yield, and Production Trends (1985 – 2007)



Source: Ministry of Agriculture and Food Security.

Garments

The garment industry in Malawi is relatively small, consisting of approximately eight major companies, most of which are located in Blantyre. The garment industry is divided into EPZ-designated exporters and local-market suppliers. Domestic-oriented garment producers mostly import their fabric (a minimal amount is bought from Mapeto) and supply a market that is flooded with imported secondhand clothing—a consequence of increased trade liberalization. As incomes in Malawi are generally low, locals generally prefer cheaper secondhand clothing, making this a difficult market to enter. Some garment producers export regionally. However, they do not account for much of the overall production.

Garment exporters generally source most of their fabric from India, Taiwan, and China, as regional fabric is not of sufficient quality. At the moment, exports are destined mostly for South Africa, with an increasing amount being shipped to the US through the AGOA agreement. Exporting firms are not allowed to supply the domestic market given EPZ regulations.

The data in Figure 4 for Lesotho and Swaziland underscore the growth potential of the garment industry in Malawi. The textile exports of all three countries as a share of the overall totals further highlights the unique opportunities presented by AGOA for garment exporting.

Opportunities

The textile production value-chain is of paramount importance to the sustainability and future of Malawi's garment industry. At the moment, Malawi is taking advantage of its privileged position in international garment trading enabled by AGOA's duty-free access to the US market. However, as soon as the region's safeguards are removed and AGOA's sourcing requirements become stricter, the country will find itself on the same playing field as India and East Asia, which may signal the end of the industry's competitive

³⁰ Agar, Jason (September 2007). *Credit Demand and Supply, Cotton Sector, Malawi*, (Blantyre: Kadale Consultants).

advantage.³¹ To prevent this from occurring, it is necessary that the country revitalize its textile industry and reconnect the separate sub-sectors into a vertically integrated value-chain spanning cotton production, spinning, weaving, knitting, and garment production.

Currently, the garment manufacturers—exporters and local producers—must rely on imported cloth for the majority of their raw material needs. This represents additional transaction costs and turnaround time that undermine the reliability, efficiency, and competitiveness of the sector. Garment producers, relying on relatively low labor costs and minimal capital investment, could easily absorb a higher domestic supply of yarn and fabric, which would allow them to increase their supply to international markets.³²

As previously mentioned, Mapeto is currently the country's sole textile producer, spinning less than five percent of the country's lint. The company has some capital investments planned for the upcoming years to increase its capacity. Given its interest in expanding operations, Mapeto has stated it would welcome investment.³³ This represents a unique opportunity for investment in a company that has relevant industry expertise at a time when Malawi enjoys preferential access to international markets. On-site expansion of operations, encompassing a significant expansion of AGOA-quality weaving capabilities, is estimated to take a minimum of two to three years.³⁴ Funding will be necessary for Mapeto to purchase about 100 looms valued at approximately US\$500,000 each, suggesting a total investment size of US\$50 million.³⁵ If its production capabilities are enhanced through investment, Mapeto can enjoy privileged access to the Malawian market of garment producers, and access to the regional market, which is subject to the same sourcing requirements.

Another alternative is setting up a new installation encompassing a vertically-integrated textile-manufacturing operation. However, this is a costlier investment than the existing on-site expansion and has a longer time frame, which may preclude the company from achieving full operating and AGOA-compliant status before the 2012 deadline. Nonetheless, this type of investment is important for the long-term growth and sustainability of the industry.

The Government has historically been slow to support the industry. Recently, however, the Ministry of Agriculture and Food Security has requested a budget of MK 150 million (US\$1.09 million) for the 2007-2008 growing season to provide input subsidies for cotton growers.³⁶ Now the Government is acutely aware of the need to ramp up cotton production with a view to creating adequate supply for the value-adding components of the value chain, i.e. textiles and garments. In line with this initiative, cotton has been listed as a priority sector in the Malawi Growth and Development Strategy (MGDS).³⁷

Constraints

The Malawian textile industry currently suffers from chronic underinvestment that has resulted in the disaggregation of the cotton-textile-garment value-chain. Major constraints are as follows:

Lack of a Cotton Council

The failure of the Government to update the Cotton Act to include the creation of a Cotton Council with the ability to regulate and reintegrate the industry along the value chain, has led to incoherent policy that does not align incentives for all stakeholders. For example, in an effort to help poor farmers, the Government established a minimum price for cotton of MK 65/kg (US\$0.47/kg) in 2008 compared with

³¹ The local/regional sourcing requirement is set to come into effect in 2012.

³² K.K. Desai, Knitwear Industries (January 14, 2008). Personal interview.

³³ Ibid.

³⁴ Cockcroft, John (2003). *Regional Market Assessment on Lint and Textiles*, (Nairobi: The RATES Center).

³⁵ Martin Mpata, Mapeto DW&S (January 17, 2008). Personal Interview.

³⁶ K.K. Desai, Knitwear Industries (January 14, 2008). Personal interview.

³⁷ Agar, Jason (September 2007). *Credit Demand and Supply, Cotton Sector, Malawi*, (Blantyre: Kadale Consultants).

MK 40/kg (US\$0.29/kg) in 2007.³⁸ This significant increase in the floor price has come at the expense of the ginners, who are currently re-evaluating their operations and assessing their cost structures to see if they can remain profitable. In Zambia, in comparison, cotton was priced at ZK 1,125/kg (US\$0.28/kg) in 2007, after the Government increased the floor price by 32 percent.³⁹

Cost of Investment

The machinery and capital investments required in textile manufacturing are high-value investments requiring access to capital, which is constrained in Malawi. This is partly responsible for the dearth of investment in the industry today.

Access to Financing

The prohibitive rate of local borrowing for investment—currently at 24 percent—makes it difficult for industrial participants to make capital investments for the replacement or maintenance of machinery, affecting production quality, efficiency and capacity.⁴⁰ Furthermore, at the smallholder level, limited access to financing has forced ginners to become lending institutions, which has resulted in increased costs.

Value Chain Gap

There is currently a breakdown in the supply chain with the ginners exporting lint, which forces Mapeto to import much of this input, instead of using local supply.⁴¹ A potential investment in Mapeto or in a new textile production facility would increase the capacity of the industry and fill the value chain gap by creating demand necessary to absorb a large enough supply of lint, making it profitable for cotton ginners to supply to local industry.

Supply-Side Constraints

About 60,000 tons of cotton was produced nationally in 2006. While this represents an increase from previous years, it still is not enough to meet the ginners' combined available capacity of over 100,000 tons. Despite the efforts of the CDA and the ginners to increase production, all ginners continue to produce under capacity. Significant development of textile manufacturing will increase the demand for lint, which should optimally be supplied by the local ginners.

Competition from International Imports

The local market is flooded with cheaper secondhand fabrics that displace the demand for garments supplied by domestic-oriented garment producers. As a result, any investment in textile manufacturing should be geared towards making fabrics for the international market, with special attention to meeting AGOA standards.

Impact and Feasibility Assessment

Impact

Employment

A revitalized textile-manufacturing sector would generate employment at the plant level. Until 1993, DW&S relied on over 4,000 employees, and after privatization in 2003, Mapeto expected to invest over US\$10 million in the rehabilitation of the plant, creating 3,500 jobs over a 5-year period.⁴² Increased demand for cotton from the textile-manufacturing sector has the potential to increase labor demand at the farm and garment production levels, where cheaper raw materials can facilitate expansion.

³⁸ Pieter Verster, Great Lakes Cotton Company (January 16, 2008). Personal interview.

³⁹ Fibre 2 Fashion (May 18, 2007). "Zambia: Cotton farmers cheer floor price rise," (Gujarat).

⁴⁰ IMF projection for 2008.

⁴¹ Martin Mpata, Mapeto DW&S (January 17, 2008). Personal Interview.

⁴² Fekete, Paul et al (2004). *Malawi: Integrated Framework, Diagnostic Trade Integration Study* (Geneva: Integrated Framework Working Group). Also see the Privatization Commission.

Linkages (Backward and Forward)

A healthy textile-manufacturing sector is the missing link to a vertically integrated cotton-spinning-garment value chain. This will have an impact on the other sectors of the chain through their responses to demand and supply factors.

Feasibility

Demand Factors

Currently, Mapeto supplies a negligible amount of cloth to domestically-oriented garment producers and none to the exporting garment producers. Consequently, local garment companies are forced to source their fabrics from outside the region. Key stakeholders in the garment industry have pointed to the fact that a robust local textile-manufacturing sub-sector would be able to supply the entire garment industry.⁴³ Furthermore, the large international demand for garments and preferential access to regional/international markets (especially in the US) signals an opportunity for the growth of local textile manufacturing.

Supply Factors

Cotton processors are currently ginning 46,000 tons of lint annually, of which only 1,000 – 1,500 tons is being spun by the domestic textile-manufacturing sub-sector. Even without considering any trends in cotton production, this shortfall is indicative of the amount of lint a revitalized textile-manufacturing sector would be able to absorb from local cotton ginners.

Enabling Environment

While a revision of the Cotton Act is necessary, especially as it relates to the establishment of a Cotton Council, Malawi has specifically designated cotton as a priority sector. Moreover, the MGDS addresses the importance of this industry, which indicates that the Government is serious about sectoral reform.⁴⁴

2. Cassava Industry Analysis

Industry Overview

Cassava is an essential part of the diet for more than half a billion people. It is the third largest source of carbohydrates for human food; its roots are high in calories, and the leaves are a good source of protein and vitamins A and B.⁴⁵ Food use represents more than half of total cassava consumption, consisting largely of fresh cassava and processed flour.⁴⁶ However, the commercial possibilities of industrial cassava products are increasingly receiving attention given its potential for export. Since the 19th century, cassava has extended rapidly across Africa. Consequently, it is now the largest center of cassava production.⁴⁷

Global Market Landscape

Approximately 70 percent of world cassava production is concentrated in five countries—Nigeria, Brazil, Thailand, Indonesia, and the Democratic Republic of Congo.⁴⁸ While mainly grown in Brazil and Thailand as an industrial crop for export purposes, cassava in Africa is used primarily for local consumption.⁴⁹ Cassava production has been growing steadily. In 1983, world cassava production was

⁴³ K.K. Desai, Knitwear Industries (January 14, 2008). Personal interview.

⁴⁴ Agar, Jason (September 2007). *Credit Demand and Supply, Cotton Sector, Malawi*, (Blantyre: Kadale Consultants).

⁴⁵ Fauquet, Claude and Denis Fargette (1990). "African Cassava Mosaic Virus: Etiology, Epidemiology, and Control," *Plant Disease* 74/6 (June).

⁴⁶ Susila, Wayan R. (2003). "Good Prospects For Cassava Development," *CGPRT Flash* 1/2 (September).

⁴⁷ Fauquet, Claude and Denis Fargette (1990). "African Cassava Mosaic Virus: Etiology, Epidemiology, and Control," *Plant Disease* 74/6 (June).

⁴⁸ FAO and IFAD (2000). "World Cassava Situation and Recent Trends," *The World Cassava Economy* (Rome: FAO).

⁴⁹ Fauquet, Claude and Denis Fargette (1990). "African Cassava Mosaic Virus: Etiology, Epidemiology, and Control," *Plant Disease* 74/6 (June).

about 131 million tons. In 1999, global cassava production reached over 160 million tons and by 2005, production had reached approximately 210 million tons.⁵⁰

Figure 8: Global Cassava Production

Region	1983–1985 Average			1993–1995 Average			2005 Projection		
	Area '000 ha	Yield kg/ha	Production '000 ha	Area '000 ha	Yield kg/ha	Production '000 ha	Area '000 ha	Yield kg/ha	Production '000 ha
World	13,855	9,5	131,424	16,540	9,9	163,746	18,595	11,2	207,556
Africa	7,518	7,3	55,207	10,158	8,2	83,062	11,961	9,5	114,202
Latin America & Caribbean	2,592	11,1	28,690	2,593	11,9	30,804	2,777	12,8	35,590
Asia	3,730	12,7	47,371	3,775	13,2	49,740	3,836	15,0	57,572
Oceania	14	11,0	156	13	10,4	139	21	9,3	193

Source: *The World Cassava Economy*, FAO.

Production in Malawi and Blantyre

Cassava production in Malawi has experienced a dramatic surge over the past decade, in all regions of the country. Cassava is the staple food crop for 30 percent of Malawi's population, particularly for the households along the Lake Shore Districts of Nkhata Bay, Nkhota-Kota, Rumpi and Karonga in the Northern region. It is grown in other parts of Malawi as a complement to maize and for use during critical food shortage periods (between October and March).⁵¹ The emergence of an urban fast food market enabled by high population densities and increasing maize prices has also resulted in increased consumption in central Malawi. Food security concerns have played a larger role in the growth of cassava in southern Malawi. Cassava's expansion in central and southern Malawi has occurred primarily at the expense of maize and tobacco; in the northern regions, which are less densely populated, cassava has expanded onto new agricultural land.⁵²

According to the 2006 – 2007 Annual Agricultural Statistical Bulletin, Malawi produced 3,238,943 tons of cassava in 2006-2007 compared to 713,876 tons 10 years earlier, representing a compounded annual growth rate of 16.3 percent. In the same period, maize production grew by 10.2 percent per annum. Assuming that world cassava production remained at the projected 2005 level, Malawi's production represents a miniscule 1.56 percent of world production.

The Blantyre urban area grows about 0.5 percent of total cassava production in Malawi. In 2006 – 2007, Blantyre produced approximately 16,925 tons of cassava.⁵³

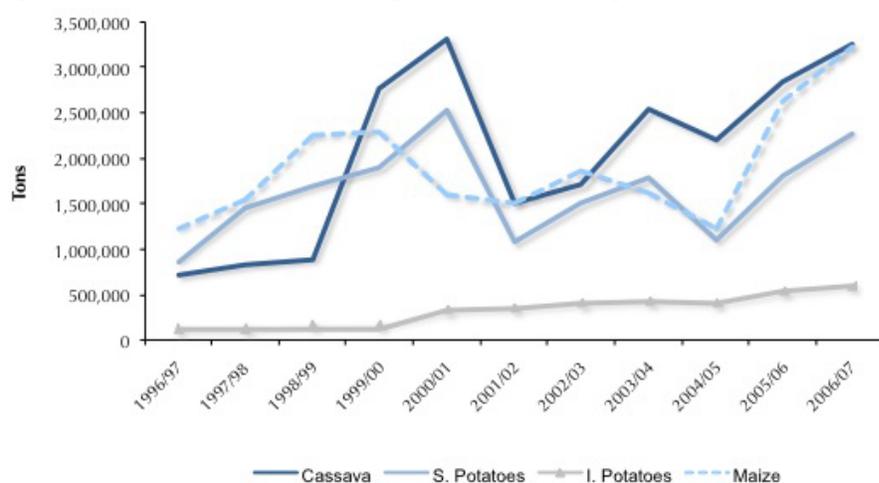
⁵⁰ FAO and IFAD (2000). "World Cassava Situation and Recent Trends," *The World Cassava Economy* (Rome: FAO). See also "Championing the cause of cassava," <http://www.fao.org/NEWS/2000/000405e.htm>.

⁵¹ Toomey, David C., Patricia Aust Sterns, and Charles Jumbe (2001). *The Impact of Improved Grades and Standards on the Export Potential of Targeted Commodities in Malawi, PFID-F&V Report*, (East Lansing, MI: Michigan State University and United States Agency for International Development).

⁵² Haggblade, Steven and Ballard Zulu (December 1-3). "The Recent Cassava Surge in Zambia and Malawi," *InWent, IFPRI, NEPAD, CTA Successes in African Agriculture Conference*.

⁵³ Ministry of Agriculture and Food Security (2007). *2006/07 Annual Agricultural Statistical Bulletin*, (Lilongwe: Government of Malawi).

Figure 9: Cassava Production in Comparison to Other Crops in Malawi



Source: Malawi Ministry of Agriculture and Food Security.

A number of supply and demand factors can account for the recent surge in cassava production in Malawi since the mid 1990s:⁵⁴

1. Increases in input costs and declining profitability as a result of the dismantling of large maize subsidy systems at the end of the 1980s caused farmers to cut back on maize production. Prices of raw roots in urban markets are lower than maize.
2. Improved varieties of cassava that have roughly doubled cassava yields. With the same labor and land without purchased inputs, improved varieties have resulted in increased output.
3. The Malawian drought of 1991 – 1992 cut maize yields dramatically and precipitated an interest in more drought-resistant crops. Consequently, cassava gathered importance at the policy table and government investment in cassava cultivation increased.
4. Arguably, a shrinking labor force due to the high HIV prevalence rates in Malawi has caused a shift favoring cultivation of cassava, a crop known for its ease of cultivation.
5. Demographic and migration trends resulting in a growth of urban areas combined with a collapse of urban incomes due to HIV-related decreases in life expectancy have fueled demand for cassava as an affordable snack food.

Value Chain Analysis

Production

Cassava does not require chemical fertilizers. It can grow under serious moisture stress and in marginal soils without a significant drop in yields.⁵⁵ Further, cassava is known for its ease of cultivation: it does not require many inputs or extensive labor.

In Malawi, small farms dominate cassava production. There is virtually no commercial production of cassava in the country.⁵⁶ Smallholder farmers grow cassava on small plots in mixed stands with other food crops such as cowpeas, maize and sweet potato, particularly among households in the southern

⁵⁴ Haggblade, Steven and Ballard Zulu (December 1-3). "The Recent Cassava Surge in Zambia and Malawi," *InWEnt, IFPRI, NEPAD, CTA Successes in African Agriculture Conference*. See also FAO, "Global cassava market study business opportunities for the use of cassava," (2004).

⁵⁵ Toomey, David C., Patricia Aust Sterns, and Charles Jumbe (2001). *The Impact of Improved Grades and Standards on the Export Potential of Targeted Commodities in Malawi, PFID-F&V Report*, (East Lansing, MI: Michigan State University and United States Agency for International Development).

⁵⁶ Haggblade, Steven and Ballard Zulu (December 1-3). "The Recent Cassava Surge in Zambia and Malawi," *InWEnt, IFPRI, NEPAD, CTA Successes in African Agriculture Conference*.

region where land is a major production constraint. A small number of farmers have begun to commercialize cassava production. However, most production is still un-mechanized and by smallholder farmers: farm plots under half a hectare account for 79 percent of the cultivated cassava crop area in Malawi, while farm plots under one hectare account for 96 percent of all crop area in Malawi.

Processing

Cassava is a versatile crop that can be processed into a number of products. Cassava can be processed into food products for household consumption, pellets for animal feed, and starch-based products that have various industrial applications.

Food Products

The processing of the root adds value by removing toxins and reducing water content, which reduces its weight, facilitating transportation and extending the product's shelf life. Upon detoxification and processing, the root can be processed into chips or flour for human consumption.⁵⁷

Raw cassava roots and leaves are fit for human consumption. The root is a rich source of carbohydrates, while the leaves provide proteins and minerals. Cassava roots have a very high water content—typically around 70 percent. Cassava roots contain a naturally-occurring toxin—cyanohydrin, a derivative of cyanide—that lends a bitter taste to the root. However, the toxin can be removed by peeling, grating, or squeezing the root.⁵⁸

Industrial Products

The cassava root can be processed into starch that has a wide variety of uses. Different types of starches and starch-based products can be manufactured for industrial uses and can be enhanced through simple value-addition techniques or complex chemical transformations. Starches subject to complex value-addition techniques are called modified starches and unmodified starches are called native starches.⁵⁹

The native and modified starches can be used for a wide variety of purposes:⁶⁰

- **Thickening agent:** Cassava flour is mainly used in bakery products. Cassava is also used in a range of food products such as canned foods, frozen foods, salad dressings, sauces, and infant foods.
- **Glue:** Cassava starch is a raw material in making glue. Cassava starch-based adhesives are used in pre-gummed papers, tapes, labels, stamps, envelopes, etc.
- **Confectionary:** Modified cassava starch and derivatives are used in confectionery for different thickening and glazing.
- **Pharmaceuticals:** Native and modified cassava starches are used in tablet production as binders and fillers.
- **Sweeteners:** Glucose and fructose made from cassava starch are used in jams and canned fruits.
- **Plywood:** Glue made from cassava is used for plywood manufacturing.
- **Paper:** Modified cassava starch is used in the wet stage of paper as well as for coding and sizing.
- **Textiles:** Cassava starch is used during the weaving, printing, and finishing stages of textile processing.

Sub-Sector Analysis: Cassava Processing

In Malawi, cassava is produced primarily for food consumption; commercial production of starch-based value-added products is virtually absent in the country.

⁵⁷ FAO and IFAD (2000). "World Cassava Situation and Recent Trends," *The World Cassava Economy* (Rome: FAO).

⁵⁸ Ibid.

⁵⁹ Ibid.

⁶⁰ Integrated Cassava Project. *Uses of Cassava*, http://www.cassavabiz.org/postharvest/1_posthvst_01.htm.

Opportunities

The robust market for value-added products that can be manufactured as a result of the commercial processing of cassava creates numerous opportunities for investment in this sub-sector. Given Malawi's production trend of surging output and the infancy of its commercial cassava-production industry, numerous business opportunities exist involving domestic and export markets. Investment opportunities exist in the following segments of the cassava processing value-chain:

1. Food Products

Cassava can be used as an import substitution crop to replace wheat flour. There is potential for further growth in cassava production provided prices of wheat flour rise relative to cassava flour. The Food and Agriculture Organization (FAO) projected that a 10 percent substitute for imported wheat and wheat flour will translate into a growth potential of 11,926 tons of cassava in Malawi, a 6.28 percent production increase over 1995.⁶¹ A sizeable opportunity exists to set up a cassava flour processing facility.

2. Industrial Products

Starch is a multibillion-dollar business with multiple industrial applications.⁶² There are more importers than exporters in the world market for cassava starch. Consequently, opportunities exist for Malawi to develop a starch manufacturing industry with a view to regional and global exports. Demand for starch products is strong in European, North American, and Asian markets.

Interviews conducted estimated that an initial investment of US\$1 - US\$2 million is required for setting up a starch production plant. The plant would produce about 3 tons of starch per hour. Malawi currently produces very little starch. Experts estimate local demand to be 3,000 tons.⁶³

Constraints

Perishability

Cassava roots have a shelf life of 24–48 hours after harvest, and fresh roots must be processed within 2 to 3 days from the moment of harvest. Cassava is also highly susceptible to microbial contamination due to poor handling, humid climate, lack of proper drying, and the long transit time from the field to markets.⁶⁴

Pest Control

Pest and disease pressures from the cassava mosaic virus (CMV), cassava mealybug and cassava green spider mite, result in lower yields. Losses in tuber yield due to diseases can be as high as 90 percent, making the need to protect cassava against diseases a crucial component of production.⁶⁵

Market Size and Access

Cassava starch is versatile and competes well with other starch varieties. While it has a high potential for exports, many markets are not completely open and price competition is fierce.⁶⁶

⁶¹ FAO and IFAD (2004). "Global cassava market study: Business opportunities for the use of cassava," *Proceedings of the Validation Forum on the Global Cassava Development Strategy* 6.

⁶² Tonukari, Nyerhovwo John (April 14, 2004). "Cassava and the future of starch," *Electronic Journal of Biotechnology* 7/1.

⁶³ Vito Sandifolo, International Institute of Tropical Agriculture (March 19, 2008). Personal interview.

⁶⁴ Toomey, David C., Patricia Aust Sterns, and Charles Jumbe (2001). *The Impact of Improved Grades and Standards on the Export Potential of Targeted Commodities in Malawi, PFID-F&V Report*, (East Lansing, MI: Michigan State University and United States Agency for International Development).

⁶⁵ Ibid.

⁶⁶ FAO and IFAD (2004). "Global cassava market study: Business opportunities for the use of cassava," *Proceedings of the Validation Forum on the Global Cassava Development Strategy* 6.

Supply-Side Constraints

The disjointed structure of supply, consisting of many smallholder farmers, can be an obstacle for commercial cassava starch and flour. Associations such as the Southern Africa Root Crops Research Network (SARRNET) and the National Smallholder Farmers' Association of Malawi (NASFAM) play an important role in providing market linkages and information transfer.

Quality Control

There is significant demand for improved grades and standards of cassava, particularly for industrial use. Price premiums can be realized for high-quality processed cassava starch and flour. However, even with increased investment in breeding or improved post-harvest technologies, it can be difficult to meet minimum FAO food safety and quality standards, thus limiting export possibilities.⁶⁷

Impact and Feasibility Assessment

Impact

There are many benefits to cassava production. Most directly, increased cassava production will result in improved food security and higher farmer incomes.

Income

In central and southern Malawi, where a majority of farmers' share of crop is sold, incomes have grown considerably, making cassava one of the most profitable cash crops in the country. A recent study suggests that cassava returns are three times that of maize, groundnuts and tobacco.⁶⁸

Spill-over Effects

We expect a marginal impact on the freight and packaging industries as a result of investment in cassava production.

Sustainability

Given that cassava production does not heavily depend on purchased farming inputs as compared to other crops, farmers can continue growing cassava with minimum need for extensive seed suppliers, fertilizer distributors or rural credit programs to sustain high yields. Moreover, the environmental effects of cassava production are minimal as the process does not generate the acidification or pesticide residue that may result from the production of other crops.⁶⁹

Feasibility

Demand Factors

An FAO study of global cassava demand noted that growing urbanization offers opportunities to develop markets for cassava. Opportunities depend on the consumption of cassava by urban residents and a distribution system linking consumers to producers. Moreover, the realization of increased cassava consumption depends on the availability of improved infrastructure, better handling and storage technologies. As noted in the FAO case study, given the increased demand for cassava chips, pellets, and starch in non-producing countries, the potential growth for cassava in producing countries is substantial.⁷⁰

⁶⁷ Toomey, David C., Patricia Aust Sterns, and Charles Jumbe (2001). *The Impact of Improved Grades and Standards on the Export Potential of Targeted Commodities in Malawi, PFID-F&V Report*, (East Lansing, MI: Michigan State University and United States Agency for International Development).

⁶⁸ Haggblade, Steven and Ballard Zulu (December 1-3). "The Recent Cassava Surge in Zambia and Malawi," *InWEnt, IFPRI, NEPAD, CTA Successes in African Agriculture Conference*.

⁶⁹ Ibid.

⁷⁰ FAO and IFAD (2004). "Global cassava market study: Business opportunities for the use of cassava," *Proceedings of the Validation Forum on the Global Cassava Development Strategy* 6.

Supply Factors

In Malawi, cassava is primarily grown by unorganized smallholder farmers. Another major factor affecting production and quality of cassava is the scarcity of planting materials. Local cassava varieties are small in size (often preferred for ease of transport) with high hydrogen cyanide (HCN) content.⁷¹

Enabling Environment

The Malawian Government and NGOs have been pushing the production of cassava as a food security measure in times of drought. For example, SARRNET has implemented various initiatives aimed at promoting seed multiplication and distribution of new cassava varieties to address the issue of scarcity of planting materials. Since 1994, cassava production has increased by more than 500 percent as a result of efforts by the Government and SAARNET to replace low-yielding varieties.⁷²

Profitability

Production of cassava requires minimum capital investment and low direct costs. The gross margins are much more attractive for farmers compared to other products. According to the 2006/2007 Annual Agricultural Statistical Bulletin, Malawi's current cassava yield is 12-30 tons per hectare and is sold at MK27.44/kg (US\$0.20/kg i.e. US\$2,350 - US\$5,880/ ha). By comparison, maize yields 400-1,500 kg per hectare and is sold at MK27.65/kg (US\$0.20/kg i.e. US\$78-294 / ha).⁷³

3. Pigeon Pea Industry Analysis

Industry Overview

Pigeon pea is the most versatile grain legume used by farmers in Malawi and has been grown in Africa for about 4,000 years.⁷⁴ In Malawi, the crop is grown mainly by smallholder farmers. It is grown for both local consumption and export, and is generally intercropped with Malawi's staple food crop, maize. Pigeon pea has multiple uses as grain, firewood and livestock feed, field boundary markings, and soil fertilizer. Pigeon pea is also drought-tolerant. As it can produce good yields with limited inputs, pigeon pea can be a potential cash crop. According to the India-based International Crops Research Institute for the Semi-Arid Tropics (ICRISAT), pigeon pea is an agriculture product that benefits the resource-poor smallholder farmer who "operates in a variable, semi-arid environment and generally lacks access to technology, cash, and other resources."⁷⁵

Global Market Landscape

According to the FAO, pigeon pea's world production was approximately 3.5 million tons in 2005. Malawi is the fifth largest producer in the world with an estimated 79,000 tons annually as shown in Figure 10. Eastern and Southern African countries are among the largest exporters of pigeon pea, particularly to India, the world's greatest producer and consumer of the crop. Exports are in the form of green and split pea. The split form is called *daal* in India and is a local staple food.

⁷¹ Toomey, David C., Patricia Aust Sterns, and Charles Jumbe (2001). *The Impact of Improved Grades and Standards on the Export Potential of Targeted Commodities in Malawi, PFID-F&V Report*, (East Lansing, MI: Michigan State University and United States Agency for International Development).

⁷² Ibid.

⁷³ Ministry of Agriculture and Food Security (2007). *2006/07 Annual Agricultural Statistical Bulletin*, (Lilongwe: Government of Malawi). Also see IDEAA/MACE website: <http://www.ideaamis.com/>.

⁷⁴ Silim, S.N., Mergeai, G., and Kimani, P.M. (eds) 2001. (September 12-15, 2000). *Status and potential of pigeon pea in Eastern and Southern Africa: proceedings of a regional workshop*, (Nairobi: International Crops Research Institute for the Semi-Arid Tropics & Gembloux Agricultural University).

⁷⁵ Ibid.

Figure 10: Pigeon Pea World Production (in tons)

Country	2001	2002	2003	2004	2005
India	2,250,000	2,260,000	2,210,000	2,430,000	2,400,000
Myanmar	325,000	466,000	4,85,000	500,000	500,000
Kenya	73,463	93,203	98,280	105,571	105,000
Uganda	80,000	82,000	84,000	84,000	84,000
Malawi	79,000	79,000	79,000	79,000	79,000

Source: Food and Agriculture Organization, FAOSTAT database.

Production in Malawi and Blantyre

Since pigeon pea is a viable crop in dry, wet and subtropical regions, it is well adapted for Malawi. In the southern region, where Blantyre is situated, pigeon pea can be found in Mount Mulanje (40 miles from Blantyre), the Zomba Plateau (40 miles from Blantyre) and the Mangochi area (120 miles from Blantyre). Official statistics from the Ministry of Agriculture and Food Security of Malawi indicate that both the hectareage and production volume of pigeon pea have grown in the last ten years. However, this trend has not been steady, reflecting one of the major constraints for agricultural investment in Malawi: the unreliability of commodity supply (See Figure 11).

Figure 11: Production Supply of Pigeon Peas in Malawi

	1998/99	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06
Ha	126,494	137,332	136,019	139,899	147,760	138,680	155,990	150,173
Tons	91,569	99,261	105,849	105,315	116,895	93,157	63,883	130,987

Source: Ministry of Agriculture and Food Security, Government of Malawi.

Value Chain Analysis

The size of the domestic pigeon pea market in Malawi is negligible. Almost all local production is exported.

Production

Malawian pigeon peas are grown by smallholder farmers as an intercrop with other products such as maize and cotton. These farmers own small plots of land with an average size between one and two hectares.⁷⁶ The quality of the product is irregular and mostly poor, and needs standardization. There are no large-scale commercial estates growing pigeon pea. The farmers sell their yields (between 0.1 to 0.5 tons per hectare) to local traders, who then sell the product to regional middlemen and processing companies.

Processing

The processing companies can export pigeon pea in two forms: raw seed and split as *daal*. The value added to the pigeon pea in this processing activity is not significant: the pigeon pea legume is split after being dried and cleaned.

Sub-Sector Analysis: Pigeon Pea Processing

Growing demand in India has created a market for processing this commodity. There are four major pigeon pea processing companies in the Blantyre area: Export Trading Company, Transglobe Produce Exports, Rab Processors, and Commodity Processors Limited. Export Trading is the leading processor, with production levels between 30 to 40 thousand tons per year. Its headquarters are based in Dar-es-Salaam, Tanzania. Transglobe, Commodity Processors, and Rab Processors are locally-owned companies.

⁷⁶ Mahmood Dalvy, Commodity Processor Limited (March 26, 2008). Personal interview.

While India is a major buyer, Malawi also exports pigeon pea and *daal* to countries such as the United Arab Emirates, Mauritius, Malaysia, South Africa and the UK.⁷⁷ Demand for *daal* is closely linked with the size of the Indian diaspora residing in the country.⁷⁸

Opportunities

Both the establishment of a *daal* processing factory and the extension of existing facilities are recommended investments in Blantyre. *Daal* is an established export product and business linkages between local producers and Indian/Southeast Asian buyers are very strong. Located in the center of Malawi's southern region, Blantyre has easy access to growing areas.

Several factors enable the consideration of pigeon pea and *daal* processing as a viable investment opportunity for FDI in Blantyre. The technology requirement for this investment is not high. Since most production is export-oriented, the processing companies enjoy benefits from the Government of Malawi by receiving EPZ designation, which promotes exports through duty refunds on imported machinery.

Constraints

Supply

Smallholder farmers that primarily grow pigeon pea are very sensitive to the market behavior of other commodities. Consequently, the crop often suffers from erratic supply and quality. The volume and quality required for an expansion of this sector are not guaranteed given the current model of production.

Transportation

Transportation costs account for 30–35 percent of the final sale price, with freight from the processing company to the ports accounting for a large portion.⁷⁹ Malawian companies need up to 12 days to fill a container for export to India while a South African exporter can fill a similar order in just 48 hours.⁸⁰

Variety

In order to take more advantage of the timing of the Indian harvest, the development of early maturing varieties is recommended. Malawi should export pigeon peas in April and May when the market prices in India are at their peak. The lack of standards and grades also make it difficult to secure a reliable flow of supply for any *daal* processing factory.

Export Promotion

The Government of Malawi does not have any export promotion program for the pigeon pea industry. Aside from the EPZ incentive available to any company that exports 100 percent of its product, there is no specific system of incentives targeted at the export of pigeon pea or *daal*, despite sectoral growth in recent years.⁸¹

Impact and Feasibility Assessment

Impact

Employment

A stronger pigeon pea export sector would not only create new factory jobs in Blantyre, but also generate jobs for farmers, with the increase in demand.

⁷⁷ Ibid.

⁷⁸ Snapp, S.S., Jones R.B., Minja E.M., Rusike J. and S.N. Silim (October 2003). "Pigeon Pea for Africa: a versatile vegetable and more," *Hortscience* vol. 38/6.

⁷⁹ Rawindra A. Kamal, Export Trading Company (March 17, 2008). Personal interview.

⁸⁰ Ibid.

⁸¹ Ibid.

Incomes

The characteristics of pigeon pea—drought tolerant, fertilizer free, inter-croppable—make it very attractive for farmers when compared to other more expensive options.

Skill Set

Daal processing does not require a new set of skills for workers or heavy investment in infrastructure and machinery. Furthermore, Malawians of Indian origin who own and manage these factories are often well connected with buyers in the sub-continent. A deep knowledge of the business and strong ethnic bonds are two major assets of Malawian enterprises competing in the pigeon pea industry.

Feasibility

Demand Factors

Demand in India has been steadily growing: according to the ICRISAT 2007 annual report, India imports 254 tons of pigeon pea per year and Africa supplies less than 50 percent of the world's demand. African exports of pigeon pea to India (including Malawi's) have considerable room for growth. Demand for *daal* unfulfilled by Malawi can be provided by Tanzania, Kenya and Uganda.

Supply Factors

According to interviews with some of the major processing companies in Blantyre, Malawi's pigeon peas are favored for their flavor, taste and size by markets in India and the UK.⁸² Further, Malawi can produce pigeon peas when the crop is off-season in India. This late harvest allows Malawian exports to compete with massive Indian local production and commands a 20–40 percent price premium during September–November.⁸³ This advantage also holds for the UK's market.

A survey of three of the four major pigeon pea processors in the city of Blantyre shows that they are running at full capacity, which indicates a need for expansion.

4. Chili Industry Analysis

Industry Overview

Malawi produces some of the hottest chilies in the world, known as Bird's Eye chilies or African Bird's Eye (ABE). Malawian Birds Eye chilies are highly sought after internationally.⁸⁴ In Malawi, chili has recently emerged as a strong export crop and demand is expected to grow. While chili production has significantly increased over the last few years, yearly volumes have not been consistent.⁸⁵

Global Market Landscape

As chili is a relatively simple crop to cultivate, it is produced all over the world. World production levels have increased, especially since the late 1990s. Current world production of chili crop totals around 7 million tons, cultivated on approximately 1.5 million hectares. Demand for chili is largely generated by the food processing industry given its importance as an ingredient and coloring agent. India, China,

⁸² Mahmood Dalvy, Commodity Processor Limited (March 26, 2008). Personal interview.

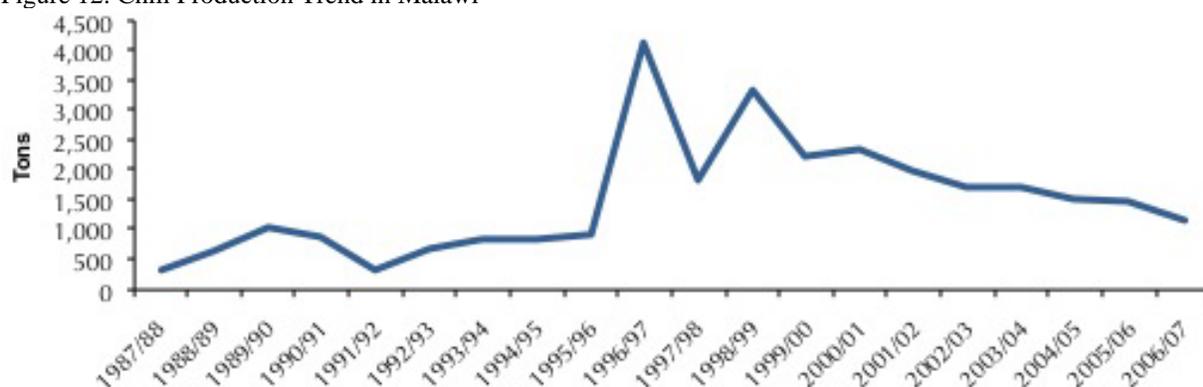
⁸³ Toomey, David C., Patricia Aust Sterns, and Charles Jumbe (2001). *The Impact of Improved Grades and Standards on the Export Potential of Targeted Commodities in Malawi, PFID-F&V Report*, (East Lansing, MI: Michigan State University and United States Agency for International Development).

⁸⁴ National Smallholder Farmers Association of Malawi (NASFAM). www.nasfam.org.

⁸⁵ Toomey, David C., Patricia Aust Sterns, and Charles Jumbe (2001). *The Impact of Improved Grades and Standards on the Export Potential of Targeted Commodities in Malawi, PFID-F&V Report*, (East Lansing, MI: Michigan State University and United States Agency for International Development).

Mexico, Thailand, the US, and the UK⁸⁶ are among the major global consumers of chili. The major producers are India, China, Spain, Mexico, Pakistan and Morocco.⁸⁷

Figure 12: Chili Production Trend in Malawi



Source: Malawi Ministry of Agriculture and Food Security.

Production in Malawi and Blantyre

The production volume of chili has been erratic, as illustrated by Figure 12. In 2006 – 2007, Malawi produced 1,109 tons of chilies.⁸⁸ According to the FAO, the producer price in 2005 was US\$1,291 per ton—eight times greater than that of maize (see Figure 13). In 2006, Malawian farmers exported 77 tons of chilies to Europe.⁸⁹

Figure 13: 2005 Malawian Commodity Price Comparison (US\$/ton)

Commodity	Price (US\$)	Commodity	Price (US\$)
Coffee	1,597	Potatoes	418
Chilies and Peppers (dry)	1,291	Pigeon peas	213
Tea	1,065	Maize	153
Cotton lint	1,022	Cassava	70
Tobacco, unmanufactured	952	Sugar cane	54
Groundnuts, with shell	532		

Source: FAOSTAT.

In southern Malawi chili is produced by individual smallholder farmers near Mount Mulanje (40 miles from Blantyre), in Liwonde (100 miles from Blantyre), and in Balaka (55 miles from Blantyre). Based on 2005 – 2006 data, about 72 percent of Malawi’s chilies were produced in the Blantyre region.⁹⁰

Currently, the Zikometso Smallholder Farmers Association, the largest smallholder chili farmer association in southern Malawi, is capable of producing 200 tons per year. Their products include raw dry chili crop, chili powder, and chili seed. Proceeds from sales are directly transferred to member farmers.⁹¹

⁸⁶ CRN India. *Commodity - Chili*, <http://www.crnindia.com/commodity/chilli.html>.

⁸⁷ Ibid.

⁸⁸ Ministry of Agriculture and Food Security (2007). *2006/07 Annual Agricultural Statistical Bulletin*, (Lilongwe: Government of Malawi).

⁸⁹ FAO Statistics. <http://faostat.fao.org>.

⁹⁰ Ministry of Agriculture and Food Security (2008). *Crop estimates data* (Lilongwe: Government of Malawi).

⁹¹ ACIDI/ VOCA (2003). *Malawi Farmers Find 'Future Belongs to the Organized,' Agriculture in the Global Economy* (Washington, D.C.: Bread for the World & Bread for the World Institute).

Figure 14: Blantyre Chili Production Estimates

Year	1998/99	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06
Ton	1,831	1,218	1,258	1,212	1,373	1,192	924	1,045
Hectare	4,088	3,083	2,875	2,706	2,361	3,083	2,102	2,097
Ton/Ha	0.45	0.4	0.44	0.45	0.58	0.39	0.44	0.5

Source: Malawi Ministry of Agriculture and Food Security, *Crop Estimates*.

Value Chain Analysis

Production

Chilies are mainly produced by smallholder farmers with very few commercial inputs. The production of chili is a labor-intensive process given the manual picking and grading process.⁹²

Processing

To process raw chili into sauce, chilies are soaked in hot water, then ground. Next, spices are added and the mixture is steamed in wood-fired boilers. Finally, the cooled product is bottled and packed.

Sub-sector Analysis: Chili Processing

Processing

Chili season lasts from March through August. The initial processing of chilies consists of drying and grading the fruit on the farm. Washing, drying, and grading are the crucial steps in post-harvest handling, where quality can be most affected.⁹³

The harvested fruit is washed in lightly chlorinated water to remove dirt and chemical residue, following which proper drying is necessary to maintain the quality of the crop.⁹⁴ Grading is based on specified standards for size, color, rotten stock, and foreign matter. There are two basic grades for birds eye chilies—A and B—with a price premium of about MK10 (US\$0.07) between grades.⁹⁵

Major Player: Nali Ltd.

Nali is the dominant company in chili sauce production in Malawi. It is located in Limbe, a few miles south of Blantyre. Nali produces bottled chili products that are sold to local and regional markets,⁹⁶ and is in the process of exporting to international markets such as the US, Canada, and Europe.⁹⁷ The company foresees growth in export demand and is optimistic about future expansion.⁹⁸

Nali currently has 150 employees. It maintains its headquarters in Blantyre and a factory in Thyolo (about 30 miles from Blantyre). The company's annual revenue is about MK51 million (US\$372,000). About 65-70 percent of total revenues are derived from the chili sauce business. With current production at 75 percent of capacity, there is room for increasing output.⁹⁹ The company maintains relationships with about 5,000 growers through a farming network, supporting them with seeds and technical assistance.¹⁰⁰

⁹² National Smallholder Farmers Association of Malawi (NASFAM). www.nasfam.org.

⁹³ Toomey, David C., Patricia Aust Sterns, and Charles Jumbe (2001). *The Impact of Improved Grades and Standards on the Export Potential of Targeted Commodities in Malawi, PFID-F&V Report*, (East Lansing, MI: Michigan State University and United States Agency for International Development).

⁹⁴ Ibid.

⁹⁵ Ibid.

⁹⁶ 70 percent and 30 percent, respectively.

⁹⁷ Monica Khoromana-Unyolo, Nali Ltd (March 17, 2008). Personal interview.

⁹⁸ Ibid.

⁹⁹ Ibid.

¹⁰⁰ Edward Labuwana Kholomana, Nali Ltd. (January 17, 2008). Personal interview.

Opportunities

Growing local and international demand provides an opportunity for investment in the chili-processing sector. Investment opportunities lie in building export-oriented chili processing facilities to create value-added products such as chili sauce. It is estimated that a chili sauce production facility requires an investment of about US\$1 million,¹⁰¹ most of which are capital costs for equipment purchases.¹⁰²

There are various factors that justify investment in the chili sub-sector in Blantyre:

1. Given that storage and transport are critical stages where quality can be compromised, Blantyre is strategically located for chili processing as 72 percent of chili is grown in the region.¹⁰³
2. With a limited number of market players (including a few foreign brands), there is room for competition in the industry. Nali is the dominant local company with a very large share of the chili sauce market in Malawi.
3. Chili processing is a high-margin business that can enable the firm to absorb costs imposed by poor infrastructure and Malawi's lack of port access.

Constraints

Meeting International Export Standards

Exporting to the US requires compliance with Food and Drug Administration (FDA) standards. Because Malawi's Bureau of Standards (MBS) is not internationally recognized and does not have adequate capacity for rigorous food tests, exporting companies must incur extra costs to get their products tested by foreign labs. For instance, Nali faced various challenges when entering the US market related to product testing, labeling (for nutritional information), adulteration (occurring on small-scale farms with crude drying, storage, and transportation procedures), and quality-assurance auditing (maintaining documentation to confirm the time and temperature of processing at various production stages).¹⁰⁴ Another risk associated with export is contamination by aflatoxin, which can build up during transport.¹⁰⁵

Increasing Competition in the World Market

Malawi will need to compete with South Africa, the dominant regional exporter of chili sauce, for a share of the market. Examples of South African companies include Bandito's Chile Co., based in Johannesburg, which exports high quality chili sauces to Australia, Europe, UK, New Zealand, Canada, Japan, and the US under the "Mama Africa" brand,¹⁰⁶ as well as Nando's, a South African restaurant chain operating globally with its own brand of chili sauce.

Lack of Adequate Supply and Quality

Given that many farmers are still not organized, ensuring adequate supply of chilies is a major challenge. Quality seeds are the most important input for good chili sauces. To secure a supply of high-quality chilies, processors will need to provide seeds to farmers, which will increase operating costs.

Impact and Feasibility Assessment

Impact

Employment Generation

The processing of chili is a labor-intensive process. Hence, investing in chili processing facilities to increase exports of value-added products will generate new opportunities for employment.

¹⁰¹ US\$ 14,000 per machine.

¹⁰² Edward Labuwana Kholomana, Nali Ltd. (January 17, 2008). Personal interview.

¹⁰³ Toomey, David C., Patricia Aust Sterns, and Charles Jumbe (2001). *The Impact of Improved Grades and Standards on the Export Potential of Targeted Commodities in Malawi, PFID-F&V Report*, (East Lansing, MI: Michigan State University and United States Agency for International Development).

¹⁰⁴ Ibid.

¹⁰⁵ Ibid.

¹⁰⁶ The Bandito's Chile Co. <http://www.banditos.co.za>.

Income

Higher profitability and incomes will bring greater economic security to local communities. Organizing farmers are known to increase incomes: for instance, members of the Zikomestso Association received 35 percent more for their chili peppers compared to nonmembers.¹⁰⁷

Local Competitive Environment

A viable business environment will encourage more farmers to produce chilies and operate chili-processing companies. A market marked by growing international demand will spur domestic chili production and help to stabilize prices.

Linkages

The use of local agricultural raw material can create markets for non-traditional agricultural products. New partnerships can be created with a greater number of farmer associations and donors.

Feasibility

Demand Factors

The global export of chili sauce in 2006 was US\$4.2 billion and US\$3.9 billion in imports.¹⁰⁸ Between 2004 and 2006, the volume of sauce imported globally grew by 8 percent per year; the global export market grew by 11 percent.¹⁰⁹

Supply Factors

The volume of chili production in Malawi has significantly increased over the past 20 years. Chili yields in Malawi are lower compared to the global average yield of about 1.8 tons per hectare. Malawian chili production needs to be larger than this to meet increasing global demand. To address supply constraints, ACDI/VOCA and NASFAM have developed initiatives to organize and train farmers, and improve the quality of chili by providing seeds and technical support.

Profitability

Chili is profitable compared to other agricultural products: the profit margin of chili sauce is about 40 percent.¹¹⁰

5. Groundnuts Industry Analysis

Industry Overview

Groundnuts (also known as peanuts) have long been an important part of smallholder production in Malawi. With annual exports of about 50,000 tons, groundnuts were a major export crop until the late 1980s before which the Agricultural Development and Marketing Corporation (ADMARC) of Malawi was the sole trader of groundnuts and was responsible for buying and selling seed.¹¹¹ However, following the liberalization of Malawi's agricultural markets, ADMARC stopped stocking groundnut seed. Consequently, farmers were forced to recycle their seeds, which led to the deterioration of nut quality.¹¹²

¹⁰⁷ ACDI/VOCA (2003). *Malawi Farmers Find 'Future Belongs to the Organized,' Agriculture in the Global Economy*, (Washington, D.C.: Bread for the World & Bread for the World Institute).

¹⁰⁸ United Nations Commodity Trade Statistics Database (UNComtrade). <http://comtrade.un.org>.

¹⁰⁹ Ibid.

¹¹⁰ Edward Labuwana Kholomana, Nali Ltd. (January 17, 2008). Personal interview.

¹¹¹ Toomey, David C., Patricia Aust Sterns, and Charles Jumbe (2001). *The Impact of Improved Grades and Standards on the Export Potential of Targeted Commodities in Malawi, PFID-F&V Report*, (East Lansing, MI: Michigan State University and United States Agency for International Development).

¹¹² Ibid.

Even though international prices remained relatively attractive, the export market collapsed between 1990 and 1999 due to quality concerns and changes in demand.¹¹³ Despite the decline of local exports, the crop remains popular and enjoys a strong internal market. Most recently, groundnuts have re-emerged as an export crop as a result of the formation of farmers' associations such as the National Smallholder Farmers' Association of Malawi (NASFAM), which promotes and markets groundnut cultivation.¹¹⁴

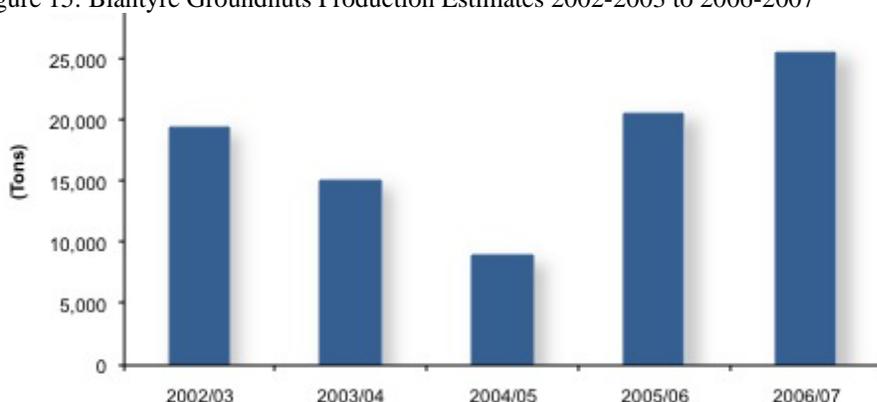
Global Market Landscape

In 2005, Malawi ranked 20th in world groundnut output, producing 161,162 tons valued at US\$77.9 million.¹¹⁵ Regional competitors include South Africa, Ghana, Nigeria, Sudan and Senegal who exceed Malawi in exports of grounds. The largest exporters in the world include China, the US and India.

Production in Malawi

The total area of groundnuts cultivated in Malawi has rapidly expanded over the past decade from 71,586 ha in 1996 to 200,000 ha in 2006.¹¹⁶ Central and southern areas, including Kasungu, Lilongwe, Machinga and Blantyre, account for over 75 percent of the total area planted.¹¹⁷ Total groundnut production has significantly increased in recent years.¹¹⁸ National groundnut production was estimated to have increased from 71,586 tons during the period of 1996 – 1997 to 263,492 tons in 2006 – 2007.¹¹⁹ In 2004, Malawi exported 8,329 tons of shelled groundnuts, valued at US\$4,109,000, making it the 17th largest exporter in the world by value.¹²⁰

Figure 15: Blantyre Groundnuts Production Estimates 2002-2003 to 2006-2007



Source: Malawi Annual Economic Report 2007.

In Blantyre alone, 25,179 tons of groundnuts were produced over 26,745 ha in 2007, representing nine percent of total production in Malawi (see Figure 15).¹²¹ The cash value of groundnuts is generally better than most cereal crops. The average retail market price of shelled groundnuts in Blantyre was MK 124.54

¹¹³ USAID (November 28, 2006). *USAID's Activities on Agriculture and Food Security in Malawi (Draft)*, (Washington D.C.: USAID).

¹¹⁴ Ministry of Agriculture and Food Security (December 20, 2007). *The Agricultural Development Programme - Malawi's prioritised and harmonised Agricultural Development Agenda: 2008-2012 (Final Draft)*, (Lilongwe: Government of Malawi).

¹¹⁵ FAO Statistics. *Major Food and Agricultural Commodities and Producers*, <http://www.fao.org/es/ess/top/country.html?jsessionid=63FA6E23D632AB87AEBE22F5D26A29E5>.

¹¹⁶ Development Associates, Inc (January 2003). *USAID/Malawi's SOI: Increased Agricultural Incomes on a Per Capita Basis – 1993 to 2001*.

¹¹⁷ Malawi Investment Promotion Agency (2007). *Investor's Guide to Malawi 2007*, (Lilongwe: MIPA).

¹¹⁸ Ibid.

¹¹⁹ Ministry of Economic Planning and Development (2007). *Annual Economic Report 2007*, (Lilongwe: Government of Malawi).

¹²⁰ FAO Statistics. *Key Statistics of Food and Agriculture External Trade*, <http://www.fao.org/ES/ess/toptrade/trade.asp>.

¹²¹ Ministry of Agriculture and Food Security (2007). *2006/07 Annual Agricultural Statistical Bulletin*, (Lilongwe: Government of Malawi).

(US\$0.88) in 2006, which is slightly higher than the national average of MK112.54 (US\$0.79).¹²²

Value Chain Analysis

Production

The groundnut value chain consists of small producers and small private traders who sell to manufacturers dominating the domestic market.¹²³ There are no adequate marketing vehicles for the groundnut value chain as a consequence of the closure of many ADMARC facilities.

Processing

Following harvest, groundnuts are first graded according to size, and then processed into roasted salted nuts, peanut butter, paste, oil, and animal feed.

Sub-Sector Analysis: Groundnuts Processing

The cultivation of groundnuts offers potential for commercial farming given its extensive value chain. There is no single dominating player in the groundnut-processing sector with many small and medium size companies competing for market share. Such players include Tambala Food Products Ltd. and Rab Processors, both located in Blantyre.

Tambala is optimistic about growth in sales of groundnut-based value-added products, given high local and international demand. Since groundnuts have high nutritional value—groundnuts provide amino acids, thiamin, riboflavin, protein, and niacin—they are highly sought after by food aid organizations to feed malnourished children, women and HIV-infected patients.¹²⁴ Tambala provides smallholder farmers with seeds and technical support to ensure product quality. Currently, 100 percent of the company's roasted-nut products are sold entirely in the domestic market. The company provides in-flight packaged peanuts for Malawi's national airline, Air Malawi. Supply shortages present the biggest challenge to Tambala, as significant funding is required to secure crop supply from farmers. Tambala competes with foreign traders who also buy harvested groundnuts from the same farmers.

Rab Processors, one of the largest and most-diversified food manufacturing companies in Malawi, is also engaged in groundnut processing. According to the company, the agro-processing industry in Malawi has not yet reached a saturation point and there exists room for growth. Rab Processors obtains groundnuts, mainly from the central region around Lilongwe.¹²⁵

The market landscape is also marked by numerous small and medium enterprises that process groundnuts on a smaller scale. For example, Mbado Enterprises in Blantyre is one such small enterprise producing edible oil from groundnuts. Mbado buys groundnuts, extracts and bottles edible oil, and sells cake for stock-feed. Set up in 1980 with two employees, it has grown to employ about 30 people.¹²⁶ The use of groundnut processing machineries does not require advanced skills; therefore, a majority of employees in groundnut processing companies are unskilled.

Opportunities

There has been support for international research-extension programs, such as the USAID-funded Groundnut and Pigeon Pea Multiplication (GPM) project conducted from 1999-2002. Significant efforts have been made to enhance high-quality seed multiplication and increase farmers' awareness of quality

¹²² Ministry of Economic Planning and Development (2007). *Annual Economic Report 2007*, (Lilongwe: Government of Malawi).

¹²³ Toomey, David C., Patricia Aust Sterns, and Charles Jumbe (2001). *The Impact of Improved Grades and Standards on the Export Potential of Targeted Commodities in Malawi, PFID-F&V Report*, (East Lansing, MI: Michigan State University and United States Agency for International Development).

¹²⁴ Rex Nyahoda, Tambala Food Products Ltd. (January 15, 2008). Personal interview.

¹²⁵ Afzel Thassim, Rab Processors Ltd., (January 14, 2008). Personal interview.

¹²⁶ Stewart Khondowe, Small Enterprise Development Organization of Malawi (March 17, 2007). Personal interview.

considerations. Through integrated value chain development enabled by private investment, Malawi can establish itself as a supplier of high-quality groundnuts.

Opportunities for investment exist in:¹²⁷

- Wholesaling, grading, and quality testing for export markets;
- Peanut butter production for local and regional markets;
- Oil extraction for domestic and international markets.

According to NASFAM, Malawian farmers enjoy a competitive advantage in producing groundnuts, given the inexpensive inputs required to produce the crop. For example, groundnut farmers do not need fertilizers, making it cheaper to produce at a low cost, while offering higher yields.¹²⁸

Substantial opportunities exist for export to the Common Market for Eastern and Southern Africa (COMESA) and the EU (particularly the UK). There is also unmet demand for Malawian groundnuts from countries in the region such as South Africa, Zimbabwe and Tanzania. Access to European markets is contingent upon improvement in production, processing and handling to meet EU standards for aflatoxin contamination which must not exceed 20 ppb.¹²⁹

Investment recommendation

Given some of the challenges that local companies face, specifically the lack of financial resources, an investment in a partnership with already existing companies such as Tambala, Mbado Enterprises and Rab Processors is recommended.

Constraints

Supply shortage

Because the supply of groundnuts largely depends on smallholder farmers, the lack of consistent supply of raw materials is one of the most challenging issues associated with the groundnut sector. There is much volatility in output due to fluctuations in smallholder production. The Government stopped guaranteeing prices, which has led to supply scarcity. To address supply constraints, Rab Processors has engaged in contract farming on a small scale. However, due to the lack of legal and contractual enforcement mechanisms, contract farming has not proven to be successful. Despite agreements between local processing companies and farmers to exchange farm inputs for supply guarantees, farmers often sell their products to other buyers that offer a better price during the harvest season.

Quality Control

Management of aflatoxin, a naturally occurring toxin, is a crucial factor for exporting groundnuts. Due to the aflatoxin levels exceeding 20 ppb, the EU ceased importing from Malawi during the 1990's. High Performance Liquid Chromatography (HPLC), considered as the only internationally accepted method of aflatoxin inspection, costs around US\$230 per sample assessed, which is prohibitively expensive. Malawi is currently testing its crops through other forms, including enzyme-linked immunosorbent assay (ELISA) kits, which can be purchased by individual farmers at about US\$1.¹³⁰

¹²⁷ Malawi Investment Promotion Agency (2007). *Investor's Guide to Malawi 2007*, (Lilongwe: MIPA).

¹²⁸ Gloria Kasongo, NASFAM (March 11, 2008). Personal interview.

¹²⁹ Mkoka, Charles (November 7, 2007.). *Purging Malawi's Peanuts of Deadly Aflatoxin*, *Sci Dev Net*, <http://www.scidev.net/en/features/purging-malawis-peanuts-of-deadly-aflatoxin.html>.

¹³⁰ Ibid.

Impact and Feasibility Assessment

Impact

Employment

Groundnut processing can create employment opportunities for unskilled workers, since the use of processing does not require advanced skills.

Feasibility

Demand Factors

Given high demand in regional and European markets, there is potential for significant price premiums for improved grades and standards of groundnuts. Demand is highly sustainable given unmet demand within regional and European markets.

Supply Factors

NASFAM has encouraged production practices that increased traditional variety yields to 700 kg.¹³¹ High quality and stable supply will depend on inputs provided by processors.

Figure 16: Linkages with the Millennium Village Project

Millennium Village Project

The Millennium Village Project (MVP) in Malawi is approximately 70 km from Blantyre and is located in the Zomba region. The MVP has embarked on the production of groundnuts as a cash crop for the purposes of selling to local companies. Commercial groundnut transactions in this region enjoy the advantages stemming from well-maintained roads. The groundnuts produced in the Millennium Village can be transported to Blantyre at low cost. Investment in groundnuts processing in Blantyre provides unique opportunities to effectively link the MVP with the Millennium Cities Initiative. With strengthened financial capacity enabled by external private investment, groundnut-processing companies can buy larger volumes from MVP farmers. Definitively linking farmers to processors will provide farmers with the incentive to consistently increase production yields, which in turn can mitigate groundnut processing companies' supply shortage issues.

6. Macadamia Nuts Industry Analysis

Industry Overview

The macadamia nut is among the most important cash crops in Malawi. It is often cited as a good alternative export crop. Due to the high initial investments and imported inputs necessary for production as well as a competitive world market, macadamia nuts are only suitable for production by estates. Grades and standards are critical in the production and processing of macadamia nuts, particularly concerning food safety and hygiene standards in processing.¹³²

Global Market Landscape

International competition is intense among major macadamia nut producers such as Australia, Hawaii, Brazil, South Africa and Kenya.¹³³ Malawi is the third largest producer in Africa, after South Africa and

¹³¹ USAID (November 28, 2006). *USAID's Activities on Agriculture and Food Security in Malawi (Draft)*, (Washington D.C.: USAID).

¹³² Toomey, David C., Patricia Aust Sterns, and Charles Jumbe (2001). *The Impact of Improved Grades and Standards on the Export Potential of Targeted Commodities in Malawi, PFID-F&V Report*, (East Lansing, MI: Michigan State University and United States Agency for International Development).

¹³³ International Society for Horticulture Science (June 2005). *Macadamia: Domestication and Commercialisation, Chronica Horticulture*, <http://www.actahort.org/chronica/pdf/ch4502.pdf>.

Kenya. The world market price for macadamia nuts has sharply fallen since the late 1990s due to excess supply.¹³⁴ Demand for macadamia nut is generated primarily by the UK, the US, and Japan.

Figure 17: World Macadamia Nut Production and Exports

Country/Region	Area (ha)	Trees ('000)	2003 Production (t)		Kernel recovery (%)	Kernel exports (t)
			Nut-in-shell	Kernel		
Australia	15,000	5,000	30,000	9,100	32	7,460
Central America	8,700	-	17,000	3,100	18	3,100
USA (Hawaii)	7,284	1,350	27,240	4,500	25	200
South Africa	7,000	3,073	12,500	3,400	28	2,975
Kenya	6,500	1,000	8,800	1,000	16	1,000
Brazil	6,000	-	3,000	600	17	540
Malawi	5,112	1,022	4,000	1,000	25	1,000
Zimbabwe	-	-	900	120	-	120

Source: ISHS, *Chronica horticulture*, vol.45, November 2, 2005.

Production in Malawi

The nuts are produced mainly in the Rumphi and Ntchisi regions, the central and northern parts of Malawi. Macadamia nuts are produced by large estates that are owned by international investment companies.¹³⁵ Since production of macadamia nuts requires high initial capital investments and imported inputs, only estates with large acreage have the potential to make a profit in a highly competitive world market.¹³⁶

Under AGOA, Malawi is one of the most notable suppliers of macadamia nuts to the US; Malawi supplied US\$2.7 million out of a total of US\$54 million of macadamia imports into the US in 2003, representing 5 percent of all macadamia imports.¹³⁷ The low cost of production and high quality of the product makes Malawi an attractive supplier of this crop.

Value Chain Analysis

Production

After harvest, macadamia nuts are stripped of their husks by a dehusker, and the kernels are separated from the shells by steel rollers that exert a pressure to crack the shells without damaging the inside kernels. Then the kernels are sorted and graded by color manually. Raw kernels are packed directly in cans or boxes, while kernels to be roasted are separated and coated in coconut oil.¹³⁸

There are five companies engaged in the production of macadamia nuts in Malawi, including Sable Farming, which is located in Limbe, near Blantyre, and Namingomba Tea Estates Ltd., in the south near Blantyre. Sable Farming owns 883 hectares of land for macadamia nut cultivation. Combining its two factories in Limbe and Mzuzu, the company produces about 400 tons of macadamia nuts per annum.¹³⁹

¹³⁴ FAO Online (May 8, 2001). *Macadamia Situation and Outlook*, <http://www.fas.usda.gov/htp2/circular/1999/99-03/macadamia.htm>.

¹³⁵ U.S. International Trade Commission (September 1998). *Macadamia Nuts: Economic and Competitive Conditions Affecting the U.S. Industry*.

¹³⁶ International Society for Horticulture Science (June 2005). *Macadamia: Domestication and Commercialisation*, *Chronica Horticulture*, <http://www.actahort.org/chronica/pdf/ch4502.pdf>.

¹³⁷ U.S. Department of Agriculture, Foreign Agricultural Service (March 2004). *World Horticultural Trade & U.S. Export Opportunities*, http://www.fas.usda.gov/htp/Hort_Circular/2004/04-02-04%20Web%20Art/2004%20Macadamia%20Situation%20and%20Outlook%20in%20Selected%20Countries.pdf.

¹³⁸ eNotes. *Macadamia Nut*, <http://www.enotes.com/how-products-encyclopedia/macadamia-nut>.

¹³⁹ Lalit Khatri, Sable Farming Co. Ltd., (January 17, 2008). Personal interview.

Processing

The nuts can be used for a multitude of purposes: they can be eaten raw, roasted as snacks, and used as ingredients for confectionery products.¹⁴⁰ In addition, oil extracted from macadamia nuts as a byproduct can be used as a cooking oil and in cosmetics manufacturing.

Sub-Sector Analysis: Macadamia Nuts Processing

According to MIPA, three world class nut processing factories are currently operating as a result of recent investment.¹⁴¹ Sable Farming conducts only simple processing including cracking, washing and drying, and exports almost all of its products in a semi-processed form. A kilogram of nuts fetches between US\$3 – US\$8, depending on the quality of the crop on the retail market.¹⁴² Sable farming employs 2,500 mostly unskilled farmers from various villages. A visit to one of Sable’s factories revealed that a high standard of quality control is being ensured through manual labor.¹⁴³ Low labor costs are keeping production costs low compared to local competitors.

Opportunities

Given the high value of the macadamia nut, more foreign investment is being sought to boost the production and processing of raw materials. Opportunities for investment exist in commercial macadamia estates.¹⁴⁴ Partnership with foreign investors will increase productivity of local estates through transfer of better technology, expansion of acreage and access to capital for machineries and equipment, including macadamia-planting machines (about US\$1.5 million).¹⁴⁵ Furthermore, development of commercial estates could generate employment opportunities for small farmers by hiring them on an ongoing basis.

Constraints

Supply Shortage

Inadequate supply is the biggest constraint in the macadamia nut industry. While smallholders are incapable of meeting grades and standards that are required for exports, there are few estates that have large enough land to benefit from economies of scale.¹⁴⁶ Sable Farming’s factories have spare production capacity. However, due to the lack of raw materials, the company is unable to produce more.

Long-term Investment

Since it takes eight years for a macadamia nut tree to grow and high levels of fixed investment and inputs are required, there is a large time lag between investment and production. Furthermore, young trees are more vulnerable to diseases and pests than older trees.

Costs Associated with Value-addition

The lack of domestically produced packaging materials and high transportation costs make value-addition within Malawi more costly. Such high costs associated with transport and handling makes it more profitable to export semi-processed raw nuts and leave further processing to the destination markets.

¹⁴⁰ Malawi Investment Promotion Agency (2007). *Investor’s Guide to Malawi 2007*, (Lilongwe: MIPA).

¹⁴¹ Ibid.

¹⁴² Nyasa Times (April 21, 2007). *Americans scramble for Malawi nuts*, <http://www.nyasatimes.com/index.php?news=620>.

¹⁴³ Lalit Khatri, Sable Faming Co. Ltd., (January 17, 2008). Personal interview.

¹⁴⁴ Malawi Investment Promotion Agency (2007). *Investor’s Guide to Malawi 2007*, (Lilongwe: MIPA).

¹⁴⁵ Lalit Khatri, Sable Faming Co. Ltd., (January 17, 2008). Personal interview.

¹⁴⁶ Toomey, David C., Patricia Aust Sterns, and Charles Jumbe (2001). *The Impact of Improved Grades and Standards on the Export Potential of Targeted Commodities in Malawi, PFID-F&V Report*, (East Lansing, MI: Michigan State University and United States Agency for International Development).

Impact and Feasibility Assessment

Impact

Employment

There are limited employment opportunities, as there are only five companies engaged in macadamia nut production. While it depends on the size of an expansion, the potential for employment generation is not very large, given limited land availability.

Skill Set

Most labor does not require a high-level skill set. For example, Sable Farming employs mostly unskilled farmers from villages, some semi-skilled labor and few skilled laborers who are engaged in research and mechanical operations. If the production or processing of macadamia nuts is expanded, it is most likely that companies will increase the number of unskilled workers. Therefore, the impact that an investment can bring to worker skills is limited.

Feasibility

Demand Factors

While there was growing demand from the 1980s until the mid-1990s that kept prices stable, world prices fell in the late 1990s as supply stocks overtook demand.¹⁴⁷

Supply Factors

The crop is mainly produced by estate holdings, as production of macadamia nuts is difficult for smallholders in terms of grades and standards. Thus, supply shortage is a problem.

Enabling Environment

AGOA offers duty and quota-free access to the US macadamia nut market.

Profitability

Initial investment is high and there is a lag-time between investment and production (it takes eight years before payback). Based on the research by Mataya and Tsonga, the return per hectare is said to be MK 10,274 (US\$74.9) while the farm gate price is MK 270.00/kg (US\$1.97/kg) and the margin after labor cost is MK 21,236 (US\$155), which is higher than other major crops such as maize, cassava, groundnuts and cotton.¹⁴⁸

¹⁴⁷ US International Trade Commission (September 1998). *Macadamia Nuts: Economic and Competitive Conditions Affecting the U.S. Industry*, (Washington D.C.: USITC).

¹⁴⁸ Mataya, Charles S. and Ernest W. Tsonga (2001). *Economic Aspects of Development of Agricultural Alternatives to Tobacco Production and Export Marketing in Malawi*, (Geneva: United Nations Conference on Trade and Development).

IV. Conclusion and Recommendations

"Current opportunities exist...however for further development to occur, government incentives and job training are necessary. The labor force is trainable and labor cost is low compared to South Africa and China."¹⁴⁹

Malawi, one of the world's poorest countries, faces significant challenges to developing a vibrant private sector to sustain economic growth. However, a stable political environment, recent macroeconomic stability, and improved external trade terms have been positive developments. Moreover, Malawi's historic agricultural production record, marked by high yields in the cotton sector, demonstrates that the country has the potential for sustained economic growth, if given the right impetus through sound policies.

An infusion of foreign direct investment can improve the livelihoods of the country's inhabitants by creating employment opportunities, diversifying the economy and developing the private sector. With a view to encouraging FDI in the promising sectors identified and alleviating the constraints that hamper the growth of these sectors, the authors provide the following recommendations:

- **Identify investors for high impact-feasibility sector investment opportunities;**
 - Textile manufacturing factories
- **Advocate for the alleviation of supply-side bottlenecks;**
 - Strengthen the capacity of farmer associations, such as NASFAM
 - Establish industry cooperatives to stabilize markets for each sector
 - Strengthen contract enforcement
- **Support institutional capacity building of key agencies, such as MIPA, MBS and MEPC;**
- **Establish stronger linkages between MPV and MCI; and**
- **Encourage partnerships with development agencies and NGOs for value-added projects.**

Identify Investors

Based on the **Investment Evaluation Framework**, the authors identified textile manufacturing as a **High Impact-Feasibility** investment opportunity. Value added products such as textiles not only command higher prices in the world market, but also generate many positive spillovers in the country, such as technology and skills transfers. Since Blantyre is the commercial center of Malawi, it is well positioned to take advantage of many of the complementary industries located in the city.

Potential foreign investors may include partners and financial investors from the region and outside the continent. It is ideal to seek investors with significant experience in the sector to bring their expertise to existing operations or new projects. Someone with a long-term investment horizon will be ideal because of an expected lengthy payback period. Also, a technical assistance component provided by an NGO or donor should be considered, given the large presence of these organizations in the country and their contributions to date (see "Encourage Partnerships with Development Agencies and NGOs" below).

¹⁴⁹ K.K. Desai, Knitwear Industries (January 14, 2008). Personal interview.

Advocate for the Alleviation of Supply-side Bottlenecks

Among the processing companies interviewed, most agreed that the unreliability and scarcity of commodity inputs adversely affects the way business is conducted, precluding companies from fulfilling larger orders in a timely fashion. The authors propose the following:

Strengthening of the capacity of farmer associations: Farmer associations have the potential to empower farmers and support the growth of agricultural commercialization. MCI should liaise with donors and farmer associations to identify any possible investment opportunities or linkages in Blantyre. Because the recommended sectors encompass agricultural value-added products, it is in MCI's best interest to connect the processing facilities with organized farmers to ensure consistent quality and quantity.

Establishment of industry cooperatives: Given the complexity and fragmentation of various industry value chains, each sector must deal with significant information asymmetry that destabilizes the market. In the case of Malawi's cotton sector, which lacks vertical integration, the establishment of a National Cotton Council would help align incentives among various industry stakeholders. Although there are numerous sub-sector associations like the Garment and Textile Manufacturer's Association (GTMA), and the Cotton Developer's Association (CDA), a sector-wide association is lacking. MCI could potentially serve as a facilitator that brings representatives from these major groups together.

Strengthening of contract enforcement: For the private sector to function effectively, strong contract enforcement is essential. In Malawi contracts between smallholder farmers and their respective buyers are not honored in many cases, which deter the formation of strong farmer-market linkages. This ultimately increases production costs for the processing companies and results in reduced profitability. MCI should continue to collaborate with the Government and international organizations to assess how the capacity of judicial institutions and other bodies overseeing contract enforcement can be strengthened.

Support Institutional Capacity Building of the Key FDI Institutions

MIPA, MBS, and MEPC in Blantyre are vital resources for potential investors. However, limited resources affect their ability to market potential investment opportunities and access investors. The World Bank's Business Environment Strengthening Technical Assistance (BESTAP) project is attempting to reduce redundancies, improve information technology infrastructure, and build capacity of staff among these agencies. MCI can play a vital role in building the capacity of these key institutions.

Establish Stronger Linkages between MVP and MCI

There should be a conscious effort to establish economic synergies between MCI and MVP which, at the moment, seem relatively limited. This synergy can be an effective vehicle for promoting farmer-market linkages. MVP's Science Coordinator, Rebbie Harawa, and her team have conducted feasibility studies on the commercial opportunities of the various crops grown in the Millennium Villages. MCI should work closely with the MVP team and use the existing feasibility studies as a guide for identifying potential linkage opportunities.

Encourage Partnerships with Development Agencies and NGOs

Many organizations, including the UK's Department for International Development (DFID), USAID, the Clinton Hunter Development Initiative, and Console International, have active programs in Malawi aimed at processing agricultural products. It is likely that some of the identified investment opportunities may require technical assistance with the infusion of investment, which can be provided by the various development agencies and NGOs operating in Malawi. MCI should seek collaboration with agencies that have prior experience in Malawi in order to better understand the market and identify potential investors.

Appendix I. Sectors with Limited Investment Potential

1. Banking Industry Analysis

Industry Overview

The commercial banking sector in Malawi is comprised of leasing companies, finance companies, development institutions, savings banks and numerous insurance companies.

According to the United Nations Capital Development Fund (UNCDF), the Government of Malawi has taken steps to improve the climate for a viable financial industry. These steps include liberalizing the sector, reducing interest rate controls, lowering bank reserves, and removing exchange regulations on capital flows.¹⁵⁰ The Government has also taken steps to improve the regulatory framework to attract private investors. The Companies Act and the Capital Market Development Act are examples of functioning regulatory structures set in place to promote investment in Malawi.¹⁵¹ Financial sector reforms have resulted in the entry of several international financial institutions into the banking sector.¹⁵² Moreover, the Government has shown substantial flexibility in relaxing equity-ownership rules for the banking industry: foreign banks are allowed to own a 100 percent stake in their Malawian counterparts.

Major financial institutions include the National Bank of Malawi, Standard Bank, First Merchant Bank, Opportunity International Bank of Malawi, INDEbank, Ecobank (formerly Loita Investment Bank), Malawi Savings Bank, Nedbank Ltd., NBS Bank (formerly New Building Society) and FDH Bank.¹⁵³ Standic Bank is 60 percent owned by South Africa's Standard Bank, while other foreign-operated banks own nearly 50 percent of the banks' total assets.¹⁵⁴

Investments in financial services are also being made by the nonprofit sector. The United Nations Development Program (UNDP), UNCDF, and the Government of Malawi have partnered to increase financing services to Malawians particularly in the area of micro-finance.¹⁵⁵ In June 2007, the Financial Inclusion in Malawi (FIMA) project, a micro-finance initiative, was implemented to provide services for poor and low-income communities. This initiative will also develop an overall strategy to strengthen the capacity of the financial services industry.¹⁵⁶ According to the UNDP, only 3 percent of Malawi's population has access to credit. To provide services for the rural population, the Malawi Rural Finance Company Limited (MRFC) was established in 1994. The MRFC is 100 percent owned by the Government of Malawi.

Opportunities

Small and Medium-sized Enterprise (SME) Lending

While the banking services market is saturated in Malawi, the biggest business opportunity in the banking sector lies in Small and Medium-size Enterprise (SME) lending. There is a need for rural micro-finance. However, many banks are hesitant to take risks associated with financing at the micro level. The only commercial bank in Malawi that provides micro-finance services is the Opportunity and Investment Bank of Malawi (OIBM).

¹⁵⁰ UNCDF. <http://www.uncdf.org/english/index.php>.

¹⁵¹ US Department of State (2007). *2007 Investment Climate Statement - Malawi*, <http://www.state.gov/e/eeb/ifd/2007/80721.htm>.

¹⁵² KPMG (2004). *Banking Survey Africa 2004*, <http://www.kpmg.co.za/images/naledi/banking%20africa%202004.pdf>.

¹⁵³ Ibid.

¹⁵⁴ Ibid.

¹⁵⁵ UNDP Malawi. *Microfinance: Financial Inclusion in Malawi (FIMA)*, <http://www.undp.org/mw/isc.html>.

¹⁵⁶ Ibid.

Constraints

Market Saturation and Increased Competition

There are currently eight commercial banks (with two additional banks expected to enter the market in the near future), two discount houses, one leasing corporation, one investment bank, one savings bank and fourteen microfinance institutions in Malawi.¹⁵⁷ Consolidation within the industry has not occurred. Consequently, there are too many banks in Malawi considering the size of the financial services market.

Figure 18: Number of Licensed Institutions in Malawi

Institution Type	No. of Institutions
Commercial Banks	8
Discount Houses	2
Building Societies	1
Leasing Companies	2
Savings Banks	1
Majority State-owned (number)	2
As a Percentage of Total Assets	35
Majority Foreign-Controlled (number)	6
As a Percentage of Total Assets	46
Asset Share of the Two Largest Banks	58
Deposit Share of the Two Largest Banks	59
Net Income of the Two Largest Banks	71

Source: UNCDF.

Macro-economic environment

The overall macro-economic environment has not been favorable for foreign direct investment in the financial services sector. The economy suffers from high interest and inflation rates.¹⁵⁸ While interest rates have declined, they still remain high at 25.5 percent (IMF estimate).¹⁵⁹ Thus, the cost of borrowing for many is prohibitive when compared with South Africa where the 2009 projected interest rate is 13.5 percent.¹⁶⁰

Figure 19: Interest Rates

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Lending rate (%)	53.6	53.1	56.2	50.5	48.9	36.8	33.1	32.2	27.1	25.5	25.0
Deposit rate (%)	33.2	33.3	35.0	28.1	25.1	13.7	10.9	11.0	5.9	3.5	3.0
91-day T-bill (%)	42.9	39.5	42.4	41.7	39.3	28.6	24.4	19.3	13.9	13.5	13.0

Source: IMF, *International Financial Statistics*.

Notes: 2008 figures are estimates. 2009 figures are forecasts.

2. Coffee Industry Analysis

Industry Overview

Coffee is produced in more than fifty countries in the world. Three countries—Brazil, Colombia, and Vietnam—account for almost 60 percent of world production. Malawi is a minor producer in the world

¹⁵⁷ US Department of State (2007). *2007 Investment Climate Statement - Malawi*, <http://www.state.gov/e/eeb/ifd/2007/80721.htm>.

¹⁵⁸ Ibid.

¹⁵⁹ Economist Intelligence Unit. *EIU DataServices*, <https://eiu.bvdep.com/frame.html>.

¹⁶⁰ Ibid.

coffee market, producing less than 0.02 percent of total world production. However, coffee is still a significant foreign-exchange earner for the country. Arabica coffee, a premium variety of coffee, is the fourth most important export crop in Malawi. Exports are made to European, Asian and American markets.¹⁶¹ The country's traditional buyers have been the Netherlands, the UK, Germany and South Africa.¹⁶² Production has been declining for a number of years due to a combination of global and local factors, including unpredictable market prices of coffee, escalating input costs and frequent droughts.¹⁶³

Production

Malawi coffee is 100 percent Arabica, which usually grows at an elevation above 950 meters. Coffee is grown mainly in the north and southeast of the country, with little production in the central region. In the south, coffee is grown only by commercial farms/estates (no smallholder production) and is mainly centered around Thyolo (30 miles from Blantyre) and Zomba (38 miles from Blantyre). In the north, coffee is predominately grown by smallholder farmers in associations affiliated with the Mzuzu Smallholder Coffee Farmers Trust (SCFT) and by two small farms around Mzuzu. Consequently, the profile of the coffee sector significantly differs between the north and south.¹⁶⁴

Value chain

Farmer Organizations

There are two main categories of coffee growers in Malawi: commercial farms/estates, and smallholder farmers. In Malawi there are currently fifteen active organizations that grow coffee: fourteen commercial farms/estates and the Mzuzu Trust, which is comprised of five associations of smallholders. Three growers/processors—Sable, Makandi, and Mzuzu SCFT—account for more than 75 percent of the estimated production in 2006.¹⁶⁵

Since 2007, the Coffee Association of Malawi (CAMAL) has managed to attract buyers from Switzerland, the US, Canada, and Japan. To push for increased market awareness of the superiority of Malawi's coffee, CAMAL has joined forces with MIPA, the United Nations Development Program's Growing Sustainable Business (GSB) program, and the United States Agency for International Development (USAID).¹⁶⁶

Opportunity

To boost production, the Government has privatized the Smallholder Coffee Trust in Mzuzu, which empowers smallholder farmers to control coffee production. Opportunities for investment exist in the form of joint ventures with organizations engaged in the production and processing of coffee.¹⁶⁷

Increasing consumption of higher-priced specialty coffee worldwide provides investment opportunities for growers. Although Malawi has some very good grades of coffee, not all of them qualify for specialty grade, which generally relegates the sale of crops to the bulk market.¹⁶⁸ Thus, the choice of target market depends considerably on each producer's willingness to seek specialty sales and make the required investment.

¹⁶¹ Malawi Confederation of Chamber of Commerce and Industry (2008). *Agricultural Sector Business Opportunities in Malawi*, (Blantyre: MCCCCI).

¹⁶² Semu-Banda, Pilirani (November 21, 2007). "TRADE-MALAWI: Coffee Industry Gets Brewing Again," *IPS News*, (Rome).

¹⁶³ USAID (November 2006). *Credit Demand and Supply Study of Malawi's Coffee Sector*, (Washington D.C.: USAID).

¹⁶⁴ Ibid.

¹⁶⁵ Semu-Banda, Pilirani (November 21, 2007). "TRADE-MALAWI: Coffee Industry Gets Brewing Again," *IPS News*, (Rome)..

¹⁶⁶ Ibid.

¹⁶⁷ Malawi Confederation of Chamber of Commerce and Industry (2008). *Agricultural Sector Business Opportunities in Malawi*, (Blantyre: MCCCCI).

¹⁶⁸ USAID (November 2006). *Credit Demand and Supply Study of Malawi's Coffee Sector*, (Washington D.C.: USAID).

Constraints

Low and Volatile World Market Price

Malawi has predominantly supplied beans into the high-volume market segment. Since 1989, it has suffered considerably from volatile world-market prices following the collapse of the International Coffee Agreement and continued world oversupply. The result has been a progressive decline of coffee growing in Malawi with growers leaving the industry or reducing their level of production. Furthermore, the financial sector generally has a negative perception of the opportunities in the coffee industry. Consequently, access to credit is restricted.¹⁶⁹

Poor Road Infrastructure

The poor state of infrastructure, especially roads and bridges, is a major constraint on the development of the smallholder coffee industry. During the rainy season (up to six months of the year), some coffee growing areas are difficult to reach or even inaccessible by motor vehicle. The result is a significantly higher cost of production.¹⁷⁰

3. Dairy Industry Analysis

Industry Overview

Intensive smallholder dairy production in Malawi commenced in 1969. The Government at the time organized farmers into Milk Bulking Groups (MBGs) and established several milk processing plants through the Malawi Milk Marketing (MMM) project. MBGs would purchase milk from members and sell it to a MMM farm located in Blantyre, Lilongwe, or Mzuzu. In 1985, the MMM project was reorganized and Malawi Dairy Industries (MDI), a statutory body, took over the three MMM dairy plants/farms and were given the mandate to operate commercially. In 1997, six MDI factories and farms were privatized. As a result, three private dairy processing companies were established in each region of Malawi: Dairibord in Blantyre, New Capital Dairy in Lilongwe, and Northern Dairy Industries in Mzuzu. Since then, two new private investors—Suncrest Creameries in Blantyre and Lilongwe Dairy in Lilongwe—have started dairy operations.¹⁷¹

The Malawi dairy industry represents a very small part of the livestock sub-sector and agricultural sector. Malawi has about 4,000 registered dairy farmers producing approximately 6,500 tons of milk annually.¹⁷² There also is an informal market that sells raw milk directly to consumers for home consumption with estimated production at 27,000 tons.¹⁷³

As shown in Figure 20, the local supply of fresh milk from both informal and formal sectors only meets about 60 percent of demand.¹⁷⁴ Therefore, the dairy industry relies on imported milk powder, which covers 90 percent of the unmet demand.¹⁷⁵ South Africa is the major country of origin for milk powder in addition to Denmark, the Netherlands, Italy, New Zealand, Argentina and Australia.¹⁷⁶

¹⁶⁹ Ibid.

¹⁷⁰ Ibid.

¹⁷¹ Imani Development Consultants (June 2004). *Review of the Dairy Industry in Malawi*, (Nairobi: RATES Center).

¹⁷² Malawi Investment Promotion Agency (MIPA). *Priority Sector for Investment: Agriculture/Agro-processing*, http://www.malawi-invest.net/inves_opp_agri.html.

¹⁷³ Imani Development Consultants (June 2004). *Review of the Dairy Industry in Malawi*, (Nairobi: RATES Center).

¹⁷⁴ Ibid.

¹⁷⁵ Edwin Chilundo, Dairibord Malawi (Private) Limited (March 19, 2008). Personal interview.

¹⁷⁶ Imani Development Consultants (June 2004). *Review of the Dairy Industry in Malawi*, (Nairobi: RATES Center).

Figure 20: Milk Production Estimates

Source	Total Quantity	%	Liters/Day equivalent
Formal	6,500	13	17,808
Informal	27,000	50	73,972
Imports	20,000	37	54,794
Total	53,500	100	146,752

Source: Imani Development Consultants.

Malawi's milk consumption in 2002 was 4.7 kg/capita/year as indicated in Figure 21, in comparison to an African average of 15kg/capita/year.¹⁷⁷ This shortfall underlines the opportunity for investment in the industry.

Figure 21: Milk Consumption per Capita in Malawi (kg)

Year	1990	1995	1996	1997	1998	1999	2000	2001	2002
Whole Milk Consumption	5.2	3.7	4.0	4.2	4.0	3.9	3.6	3.6	4.7

Source: FAO Database, 2005.

Value Chain

Generally, farmers that join MBGs (i.e. with a tank and cooling facility) are serviced by processing companies on a daily basis. The processed products are then distributed to the wholesalers and retailers to be sold primarily to urban consumers. Rural consumers purchase raw milk directly from the informal sector. Additionally, imported powdered milk is used by producers to supplement raw milk; imported dairy products such as long-life milk are sold directly to wholesalers and retailers.

Production

The dairy industry is better developed in the south of the country. Of the three Milk Shed Areas (MSAs) in Malawi, around 80 percent of formal milk is produced in the Blantyre milk shed. The Shire Highlands area, a plateau in the south with an area of about 2,800 square miles, is said to be suitable for smallholder dairying with good feed resources, a favorable climate, and a relatively low disease challenge to dairy cattle.¹⁷⁸ The milk collection network is also well developed in this area and it provides farmers with a convenient selling point and thus is a valuable asset.¹⁷⁹

Twenty MBGs are registered and all are organized through the Southern Highlands Milk Producers Association (SHMPA). Altogether 2,700 smallholder farmers are registered into twenty-one MBG's. The average MBG delivers around 528 liters of milk per day, resulting in 12,157 liters per day total. Average total milk collection per day in the Blantyre MSA has increased from 9,201 liters per day in 1998 to 12,157 liters per day in 2004.¹⁸⁰ However, individual farmers produce on average about 7 liters per day, while commercial farmers have the potential to produce up to 40 liters per day.¹⁸¹

Processing

Two of the five major dairy processing companies, Dairibord and Suncrest Creameries, are located in Blantyre. Apart from the five major companies, smaller scale processing units are active around the major cities.

¹⁷⁷ Ibid.

¹⁷⁸ Encyclopædia Britannica Online (2008). "Shire Highlands," (Chicago: Encyclopædia Britannica, Inc.).

¹⁷⁹ Imani Development Consultants (June 2004). *Review of the Dairy Industry in Malawi*, (Nairobi: RATES Center).

¹⁸⁰ Ibid.

¹⁸¹ Edwin Chilundo, Dairibord Malawi (Private) Limited (March 19, 2008). Personal interview.

Because local producers can only produce 60 percent of the requirement of the processing industry, the processing companies are forced to import milk powder to meet demand, raising processing costs. Consequently, the utilization rate of the dairy industry is as low as 26 percent, causing severe financial problems for some companies.¹⁸² The retail milk price is about MK115 – 120 (US\$0.84 – 0.87) per liter, while powdered milk is significantly more expensive at MK 848 (US\$6.19) per kg. Raw milk sold directly by farmers is much cheaper.

Dairy products from Zimbabwe enter Malawi at very competitive prices because of bilateral free trade agreements. This also causes unfair competition against local producers as processors have to pay a surtax on packing materials whereas importers are exempt from the surtax and are not required to pay duties.¹⁸³ Further, many of the value-added products are imported from South Africa.¹⁸⁴

A Dairy Processing Association has been created to increase collaboration among Malawian dairy processors. This association is currently headed by Dairibord.¹⁸⁵

Major Market Player: Dairibord Malawi (Private) Limited

Dairibord, established in 1998, is 60 percent owned by Dairibord Zimbabwe Ltd.; the remaining ownership stake is equally shared between the Malawian Government through the National Investment Fund (20 percent) and by the employees of Dairibord (20 percent). Dairibord manufactures a wide variety of dairy products including short- and long-life liquid milk, fresh cream, powdered milk, cheese, butter, yoghurt, and ice cream. Dairibord has annual revenues of about MK1.2 billion (US\$8.8 million) and employs around 160 people. It has 60 – 65 percent of the market share in Malawi and 80 percent of the market share in Blantyre.¹⁸⁶ Dairibord has the capacity to process 40,000 – 50,000 liters, though only 38 percent of its capacity is currently being used.¹⁸⁷

Opportunity

Investment opportunity in the dairy sector is limited. Many of the opportunities suggested included cattle breeding, feed growing and feed production. Technical assistance on artificial insemination may require funding from donors rather than private investors.

Constraints

There was a deficit of approximately 25.6 million liters of milk in 2006. Given the fact that many Malawians cannot afford to buy milk, there is a business opportunity to increase consumer access to high-protein dairy products at a lower price. However, due to numerous constraints, most investment opportunities are for donors (not private sector investors) to improve milk production yields through cattle breeding, feed production, technical assistance (artificial insemination), and increasing access to finance.¹⁸⁸

For example, USAID is encouraging smallholder farmers to diversify into dairy production, a very lucrative business in Malawi and well-suited to Malawi's limited land area. USAID grantee Land O' Lakes (LOL), partnering with World Wide Sires (WWS), continues to promote the growth of the dairy

¹⁸² Imani Development Consultants (June 2004). *Review of the Dairy Industry in Malawi*, (Nairobi: RATES Center).

¹⁸³ Imani Development Consultants (June 2004). *Review of the Dairy Industry in Malawi*, (Nairobi: RATES Center).

¹⁸⁴ Ibid.

¹⁸⁵ Edwin Chilundo, Dairibord Malawi (Private) Limited (March 19, 2008). Personal interview.

¹⁸⁶ Imani Development Consultants (June 2004). *Review of the Dairy Industry in Malawi*, (Nairobi: RATES Center).

¹⁸⁷ Edwin Chilundo, Dairibord Malawi (Private) Limited (March 19, 2008). Personal interview.

¹⁸⁸ Imani Development Consultants (June 2004). *Review of the Dairy Industry in Malawi*, (Nairobi: RATES Center).

industry in Malawi through 55 dairy associations with over 6,376 members (46 percent of which are women).¹⁸⁹

Low Productivity and Efficiency

The average milk production per day in Malawi is estimated at 5.7 liters per cow. Smallholder productivity is still very low mainly because of limited knowledge and the lack of critical inputs such as feeds and artificial insemination. Factors that cause low productivity and slow herd growth are: lack of good animal husbandry practices, long calving intervals, lack of good quality feed, and insufficient veterinary, artificial insemination and extension services.¹⁹⁰

Because of the low levels of production, many of the processing companies are operating at about 30 percent of full capacity.

Lack of Cattle

The dairy sector suffers from a limited number of cows. This is partly caused by farmers abandoning investments in cattle due to rampant theft and the high costs associated with livestock maintenance.¹⁹¹ The Government of Malawi is importing about 5,000 cows annually; the Clinton Hunter Development Initiative is launching a new project to address this issue.¹⁹²

Access to Capital

Smallholder dairy farmers are considered risky borrowers. Increasing access to capital can help farmers obtain inputs that increase productivity.

Demand

Despite growing demand, the price of milk continues to be prohibitively expensive for the average Malawian household, making it a luxury consumption item. Moreover, a high percentage of households in Malawi do not have refrigeration facilities to store fresh milk.

4. Tea Industry Analysis

Industry Overview

Malawi was the first country in Africa to grow tea for commercial use. Tea production started in the Mulanje region in the 1880s.¹⁹³ Tea is the second most important export crop in Malawi accounting for 7.9 percent of total export earnings. Tea is exported to European, Asian and American markets.¹⁹⁴ In 2006, Malawi exported 43,990 tons of tea, equivalent to US\$49.5 million, or around four percent of annual world exports.¹⁹⁵

In terms of crop size, Malawi is the second largest producer of tea in Africa after Kenya, producing medium grade teas.

¹⁸⁹ US Department of State, Bureau of African Affairs (October 2007). *Background Note: Malawi*, <http://www.state.gov/r/pa/ei/bgn/7231.htm>.

¹⁹⁰ Imani Development Consultants (June 2004). *Review of the Dairy Industry in Malawi*, (Nairobi: RATES Center).

¹⁹¹ Martin B.W. Banda, USAID (March 11, 2008). Personal interview.

¹⁹² Edwin Chilundo, Dairibord Malawi (Private) Limited (March 19, 2008). Personal interview.

¹⁹³ Butler, Reg (March 20, 2005). "Africa tea faces over-production," *Tea & Coffee Trade Journal*, (New York).

¹⁹⁴ Malawi Confederation of Chamber of Commerce and Industry (2008). *Agricultural Sector Business Opportunities in Malawi*, (Blantyre: MCCCCI).

¹⁹⁵ United Nations Commodity Trade Statistics Database (UNComtrade). <http://comtrade.un.org>.

FAO projects world black tea production to grow at 1.9 percent annually over the next 10 years reaching 3.1 million tons; world green tea production is expected to grow at a faster rate of 4.5 percent annually reaching 1.57 million tons. In terms of consumption, black tea demand is projected to reach 2.8 million tons, indicating an oversupply of about 300,000 tons as strong consumption growth in producing countries is unlikely to offset declines in traditional net import markets.¹⁹⁶

Figure 22: World and Malawi Tea Price Trends



Source: FAO.

Since 2006, the oversupply of tea started waning. According to an FAO report, world tea prices were expected to maintain their upward trend in 2008 as a result of tight supply on the world market caused by a projected 10 percent decrease in Kenyan production due to the political instability early in the year.¹⁹⁷ Tea exports from India, the second largest producer in the world, was reported to have risen about 10 per cent in 2008, due to lower output from Kenya and higher prices. The volume produced in Kenya, on the other hand, rose by about four per cent.¹⁹⁸

Production

Today, large commercial estates account for 93 percent of tea production. The remainder is produced by 6,500 smallholder growers. Most of the estates are based in the districts of Mulanje and Thyolo, with ownership concentrated among 11 companies. Of these the largest is Eastern Produce Malawi (EPM), which owns and operates twenty-one estates. The major shareholder in EPM is the Kenya-based company, Linton Park Plc. The Industrial Development Corporation of South Africa, a development bank, is a minority shareholder.¹⁹⁹

Many of the estates work closely with smallholder tea growers providing them with fertilizers and other inputs. The provision of credit by the estates is critical to ensuring consistently high quality yields from growers.

¹⁹⁶ FAO News (February 14, 2008). *Tea prices to maintain upward trend in 2008*, <http://www.fao.org/newsroom/en/news/2008/1000784/index.html>.

¹⁹⁷ FAO. *Championing the cause of cassava* <http://www.fao.org/NEWS/2000/000405-e.htm>.

¹⁹⁸ The Hindu (February 09, 2009). "Tea exports rise 10 pc in 2008; output up 4 pc," (New Delhi).

¹⁹⁹ Butler, Reg (March 20, 2005). "Africa tea faces over-production," *Tea & Coffee Trade Journal*, (New York).

Roughly one-third of Malawi's crop is sold in a local auction—the Limbe Auction—with two-thirds sold directly. A high proportion of the tea is bought by major international companies such as Unilever and Lyons Tetley. The biggest export destinations are the UK and South Africa.

The two major Malawian tea brokers are Tea Brokers Central Africa Ltd. and Tea & Commodity Brokers Ltd. Purchasing tea locally is often difficult given the presence of international companies (e.g. from the UK) that purchase tea in bulk at local auctions.

Processing

Malawi's major tea processing companies are: Chombe Tea (recently purchased by Mulli Brothers), which produces high-quality tea; Rab Processors (which targets rural areas); Mateco; Mygold (a relative newcomer into the market); and Mulli Brothers. International competition includes South African brands such as Five Roses. Foreign companies often purchase tea from Malawi, export it to South Africa, blend and package it, and then import it into Malawi at a premium price.²⁰⁰

The following are key steps in the production process: 1. Purchase processed tea in paper sacs from the auction or the tea estates; 2. Blend tea manually; and 3. Package tea using machines.²⁰¹

Company Profile: Chombe Tea

Chombe Tea was established fifty years ago, and is currently entirely owned by Press Corporation, the largest conglomerate in Malawi, with interests in finance and manufacturing, among others. The tea was blended and packed by Tambala Foods, a subsidiary of Press Corporation Limited. In 2004, the latter sold Tambala Foods with all its brands except Chombe Tea. Chombe Tea was maintained as a subsidiary of Press Corporation and currently has 42 employees. In 2007, the company produced about 360 tons of tea and generated about MK150 million (US\$1.1 million) in sales.²⁰²

Chombe Tea has three product lines: Export Quality,²⁰³ Economy,²⁰⁴ and Leopard.²⁰⁵ It currently has about 65 percent of the total market share in Malawi.²⁰⁶ The company does not own any tea farms and purchases processed tea in auctions (60 – 70 percent) or private sales (30 – 40 percent). Chombe Tea has the capacity to blend 3,000 kilograms daily. The company does not face a capacity constraint even if export quantities substantially increase.²⁰⁷

Press Corporation had been unsuccessful at attracting a joint venture partner. Consequently, Chombe Tea was recapitalized and Press Corporation injected new funds to enable the purchase of new production machinery and the provisioning of working capital. The company invested in full automation, new corporate branding and packaging for all of its product lines, and the introduction of new product-tagged tea bags.²⁰⁸

Currently, Chombe Tea sells its products mainly for local consumption. The company views exports as a major area of growth and plans on increasing its exports to contribute 40 percent of total production

²⁰⁰ Yvonne M. Chikwiri, Chombe Tea (March 20, 2008). Personal interview.

²⁰¹ Ibid.

²⁰² Yvonne M. Chikwiri, Chombe Tea (March 20, 2008). Personal interview.

²⁰³ Constitutes 70 percent of total company revenues.

²⁰⁴ Constitutes 40 percent of total sales volume.

²⁰⁵ Targets the low income segment.

²⁰⁶ Yvonne M. Chikwiri, Chombe Tea (March 20, 2008). Personal interview.

²⁰⁷ Ibid.

²⁰⁸ Press Corporation. *Chombe Tea*, <http://www.presscorp.com/index.php?module=htmlpages&func=display&pid=5>.

volume. The new market that the company is contemplating exporting to is Zambia (where currently an established tea brand does not exist), South Africa, Mozambique, and possibly Europe.²⁰⁹

Opportunity

Opportunities for investment in the tea sector are limited. MIPA recommends investment in 'new' high-yielding clonal varieties to improve quality and productivity as well as in irrigation infrastructure, which can significantly increase yields. However, these investments are more likely to be conducted by donors.

One potential area of investment is the refurbishment of existing tea processing facilities and the construction of new tea processing facilities for export purposes. Opportunities exist particularly in the production and processing of green tea for East Asian markets and other specialty herbal teas.

Constraints

Lack of Value Addition

Much of the tea produced in Malawi is sold in auctions for export only to be imported back into Malawi in processed form for consumers. Many of the players in the value chain, ranging from smallholder tea growers to estates, are currently not able to take advantage of extensive contribution margins given the lack of value addition.

Transportation Cost

Transportation costs related to exporting tea are a major issue for processing companies since Malawi is landlocked and infrastructure is limited. Targeting neighboring countries for export may mitigate this issue.

Export Issues

Neighboring countries such as Zambia require tea to be sold on credit, which can cause cash flow issues for commercial enterprises. This is a major sticking point in negotiations between parties and is the reason why Chombe Tea exports to Zambia are currently on hold.

Access to Finance

Many of the estates that provide credit to smallholder tea growers achieve high repayment rates (greater than 95 percent), since payment is deducted monthly from green leaf purchases. However, there is an unmet credit demand for the majority of existing smallholder tea growers.²¹⁰

5. Telecommunications Industry Analysis

Industry Overview

Since 1996, the telecommunications sector in Malawi has experienced dynamic activity with new major players in the mobile, internet and fixed line markets. The monopoly of the government-owned cellular operator Telecom Networks Malawi (TNM) ended in 2001, when Celtel Malawi entered the market. Celtel Malawi is part of the Celtel Group, a pan-African mobile service provider operating in 15 African countries.²¹¹ Since April 2005, Celtel Group has been a wholly fully owned subsidiary of MTC Group, a Kuwait-based mobile service provider operating in five countries in the Middle East. TNM's market share is said to be approximately 40 percent, while Celtel controls 60 percent.²¹² Between these two companies, the number of active connections is less than one million, which is seven percent of the population in Malawi. The Government of Malawi is currently finishing the process of awarding a license to a third

²⁰⁹ Ibid.

²¹⁰ USAID. (June 2006). *Credit Demand and Supply Study of Malawi's Tea Sector*, (Washington D.C.: USAID).

²¹¹ Celtel. www.celtel.com.

²¹² Daniel Makata, TNM (March 27, 2008). Personal interview.

mobile operator. In 2007, five companies applied for a license, including the South African-based company Econet Wireless and the US-based company Millennium Global Telecom.²¹³

Mobile sales are heavily concentrated in the top-up business (prepaid cards), with a volume of negligible post-paid contracts. This market structure exists because of consumers' limited income levels: prepaid cards allow more usage control and post-paid contracts are more expensive.

In July 2008, Globally Advanced Integrated Networks (GAIN) was awarded the third mobile phone license. The company intends to roll out its network in May 2009.²¹⁴ Shortly thereafter, MACRA opened bids from six companies for the fourth mobile phone service license.²¹⁵

Malawi has one service provider of fixed lines: Malawi Telecommunications Ltd. (MTL). In February 2006, the government-owned MTL was privatized and handed over to THL, a consortium comprised of Press Corporation Limited, NICO Holdings Limited, Old Mutual Society, and Detecon GmbH.²¹⁶ In 2007, the Malawi Communications Regulatory Authority (MACRA) awarded the second fixed-line license to Access Communications Limited, a consortium of African investors.²¹⁷ In spite of the continuous growth of these two markets, there are growing concerns about their state of maturity.

After ten years of operation, the Internet Service Provider (ISP) market in Malawi is also crowded. There are several companies providing web-hosting, web-mail and wireless services such as Malawi Net, Globe Internet, Skyband Corporation and MTL-Liberty. The bulk of the business is concentrated in the more expensive wireless corporate services segment. Malawi Net and Skyband own 50-60 percent of this market. Individual consumers still mainly use dial-up connections. More than 75 percent of the approximate 40,000 Internet users are located in the urban areas of Blantyre and Lilongwe.²¹⁸ The ISPs have also begun to offer new types of services such as Wi-Fi hotspots around Blantyre, Lilongwe and other major tourist areas. High growth of corporate wireless and broadband services have resulted in bottlenecks given the lack of capital and limited access to bandwidth.

The industry is regulated by MACRA, which was established under the Communications Act of 1998. This legislative and regulatory framework was designed for the liberalization of the telecommunications sector and for enhancing the participation of the private sector.

Like most African countries, Malawi's telecommunication indicators (access to telephones, internet, mobiles and personal computers) have significantly improved in recent years according to the World Bank and the International Telecommunications Union. Between 2000 and 2005, Malawi increased the number of telephone main line access per 1,000 inhabitants from 4 to 8, internet users per 1,000 inhabitants from 1 to 4 and personal computer users per 1,000 inhabitants from 1 to 2. The number of mobile subscribers per 1,000 inhabitants increased from 4 in 2000 to 33 in 2005, representing an increase of over 600 percent. As a percentage of GDP, total telecommunications sector revenues climbed from 1.7 percent to 4.5 percent in the same period.²¹⁹ However, Malawi's "telecommunication revolution" is limited in comparison to the rest of Sub-Saharan Africa, with an average of 17 subscribers per 1,000

²¹³ Chimwala, Marcel (August 15, 2008). "Malawi names preferred bidder for third mobile licence," *Engineering News Online*, (Johannesburg).

²¹⁶ The Privatization Commission. <http://www.privatisationmalawi.org/>.

Marcel (August 15, 2008). "Malawi names preferred bidder for third mobile licence," *Engineering News Online*, (Johannesburg).

²¹⁶ The Privatization Commission. <http://www.privatisationmalawi.org/>.

²¹⁷ Chimwala, Marcel (June 29, 2007). "Malawi's second operator moves to expand network," *Engineering News Online*, (Johannesburg).

²¹⁸ Ken Thomas, Skyband Corporation (March 26, 2008). Personal interview.

²¹⁹ World Bank (April 2007). *World Development Indicators Database*, <http://devdata.worldbank.org/external/CPProfile.asp?CCODE=MWI&PTYPE=CP>.

inhabitants with telephone main line access, as well as 125 mobile subscribers and 29 internet subscribers per 1,000 inhabitants.²²⁰

Opportunity

The major opportunity in the telecommunications sector stems from the overall growth being experienced in this sector across Africa. Mobile technology allows underserved and rural areas to connect to urban areas with little investment. The focus of the Government of Malawi on rural infrastructure can provide an opportunity for Blantyre-based companies. The rural infrastructure development plan consists partly of the development of “telecenters” —kiosks with an array of basic telecom services such as phone, mobile and internet—run by public-private partnerships.

The private sector has not been a major actor in the development of the telecommunications sector in Malawi. There is a lack of centers to train people in computer and telecommunications skills. Additionally, investments in infrastructure and human capital typically associated with this industry (e.g. local technicians, engineers and programmers) are limited. Blantyre’s urban area may constitute a market large enough for a kiosk-related investment with a range of telecommunications services, but since ISPs do not provide incentives for SMEs, and equipment is expensive, demand is limited.

The arrival of a second fixed line operator can provide an opportunity for better dial-up connections. Further, if access to greater bandwidth is obtained, ISPs can expand new wireless-based services. New market strategies for increasing airtime can also extract more profits from an almost-exhausted market.

Mobile companies and ISPs may also lobby for the reduction of duties and import taxes for handsets, routers and other telecom-related machinery.

Constraints

Market Saturation

The major constraint for both the mobile and internet markets is market saturation. Diminishing industry growth, increasing technical bottlenecks, and limitations imposed by low incomes are dramatically reducing the room for new investments and market entrants. The cost of entry is very high and newly admitted operators are expected to face entrenched and seasoned competitors.

The rural initiative has been designed and promoted by the Government of Malawi as a development project with the help of the World Bank. A for-profit company may find the rural telecenters an unattractive investment because of costly initial outlays in equipment and risks from unsteady demand. Moreover, technological challenges may emerge when connecting underserved areas with the main telecom infrastructure of the country.

Difficulty in Increasing Bandwidth

The difficulty of increasing bandwidth is a major limitation for the scope of services provided by the ISPs to Malawi users. Unreliability of power and the quality of fixed line connections are also technical constraints affecting growth in the sector.

6. Tourism Industry Analysis

Industry Overview

According to the National Strategy for Sustainable Development (NSSD), the tourism industry worldwide is experiencing high growth and is at its peak in Malawi.²²¹ Tourist attraction areas in Malawi are mostly

²²⁰ Ibid.

centered around Lake Malawi which has two resort areas, Mangochi, located on the south side of the lake and the Salima area, on the Western Shore. In the Blantyre area, major attractions include Mount Mulanje, Majete National Park, Zomba Mountain, Liwonde National Park, and tea estates in Thyolo.

The Malawi Government Development Strategy (MGDS) has identified the tourism industry as a priority and is assisting in the development of this sector. The tourism industry has the potential to be an employment-generating sector. The tourism industry currently accounts for 7 percent of GNP, and 5 percent of employment.²²² Malawi is an attractive tourist destination; however, it lacks the infrastructure and investment necessary to sustain a critical mass of visitors.

The Government of Malawi is currently strengthening the infrastructure necessary to sustain this industry.²²³ Improvements have been seen in road networks, airports, railways, lake transport, and water and energy supply.²²⁴ According to the Government's Strategic Tourism Development Plan for 2003 – 2008, efforts are also being made to strengthen the facilities of the Ministry of Tourism Parks and Wildlife, with a view to targeting the ecotourism market.²²⁵ Furthermore, the Ministry of Finance in conjunction with the Malawi Tourism Association has identified incentives to attract foreign investments in this sector. These incentives include the construction of hotels and other tax-free opportunities such as duty-free imports of vehicles for tourism.²²⁶

Another plan aiming to develop tourism in Malawi is the aforementioned NSSD in which tourism is identified as a priority. The objective of the NSSD is to enable Malawi to maximize its potential for tourism development.²²⁷ Projects mentioned in the NSSD include Lake Malawi, national parks, game reserves, mountain plateaus, and urban centers.²²⁸

Additional strategies to strengthen this sector include the Hotel and Tourism Act, which aims to establish resort-like attractions such as casinos in Blantyre and Lilongwe.²²⁹ Since 50 percent of tourists in the region are on business, hotels that focus on business travelers have proven to be fairly successful in Blantyre.²³⁰ There are five hotels in the city that can provide services at par with international standards and with a capacity to accommodate about 1,000 guests.²³¹ High-grade hotels such as Malawi Sun Hotel, Protea Hotel and Victoria Hotel, as well as surrounding attractions such as Mulanje Mountains, Shire River, and Zomba villages, among others, have the potential to attract visitors.²³² Successful investments within the tourism industry include the South African-owned Protea Hotel, which has generated positive returns; the Victoria Hotel, Malawi Sun Hotel, and the Cresta Hotel in Lilongwe, which is locally owned.

²²¹ Ministry of Mines, Natural Resources and Environment (2004). *The National Strategy for Sustainable Development*, <http://www.sdn.org.mw/enviro/chilwa/ministry/strategicplan/>.

²²² Regional Program on Enterprise Development (June 2006). *The Malawi Investment Climate Survey*, (Washington, D.C.: World Bank).

²²³ Ministry of Mines, Natural Resources and Environment (2004). *The National Strategy for Sustainable Development*, <http://www.sdn.org.mw/enviro/chilwa/ministry/strategicplan/>.

²²⁴ Ibid.

²²⁵ Ibid.

²²⁶ Katopola, Isaac, Ministry of Tourism (January 7, 2008). Personal interview.

²²⁷ Ibid.

²²⁸ Ministry of Mines, Natural Resources and Environment (2004). *The National Strategy for Sustainable Development*, <http://www.sdn.org.mw/enviro/chilwa/ministry/strategicplan/>.

²²⁹ Malopa, Bright Marc E (January 4, 2007). *Rich in Resources: Poor Promotional Methods Ampres Tourism Growth*, <http://www.nyasatimes.com/index.php?news=83>.

²³⁰ Salad Nthenda, Malawi Tourism Association (March 18, 2008). Personal interview.

²³¹ Ibid.

²³² Katopola, Isaac, Ministry of Tourism (January 7, 2008). Personal interview.

The number of visitors to Malawi has grown significantly over the past decade. In 2006, 683,000 people visited Malawi, compared to only 183,800 in 1996.²³³ According to 2006 data for Malawi, 49 percent of visitors were business travelers, 26 percent were tourists, and 25 percent were visiting friends and family members. Of the 683,000 visitors in 2006, 87,000 (or 14 percent) visited Blantyre; about 32 percent of these were business travelers.²³⁴ Despite efforts being made to develop this industry, the current occupancy rate for international quality hotels and lodges remains low, at about 46 percent.²³⁵

Opportunity

Investment opportunity in the tourism sector in Blantyre is limited. Construction of business hotels and a conference facility have been contemplated, though demand seems to be limited.

Constraints

Inconvenient Access

Blantyre is poorly connected by air. There are no direct flights from Europe or the U.S to Malawi. There are a limited number of flights to Malawi from regional destinations, resulting in high costs and long transit times.

Poor Infrastructure

The lack of adequate roads, telecommunications and energy supply makes travel inconvenient for visitors whether on business or vacation.

Lack of Funding

The Ministry of Tourism has a very limited budget (about US\$300,000 per year).²³⁶ As a result, Malawi is unable to market itself as an attractive tourist destination. Further, Malawi does not enjoy the same reputation as an ideal vacation spot compared with regional competitors like South Africa.

Lack of Tourism Training and Expertise

The Malawi Institute of Tourism is situated in the center of Blantyre and trains workers for the hospitality industry. Since the institute's capacity is very limited, only 300 students can be accommodated per year. Consequently, many of the personnel in the hospitality industry remain untrained.²³⁷

Lack of Competitive Advantage over Regional Competition

There is a scarcity of tourist attractions in Blantyre compared with cities in neighboring countries such as South Africa, Tanzania, and Kenya that are widely known for their wildlife and other attractions.

Competition from Lilongwe

Since the President's official residence was moved from Blantyre to Lilongwe after President Mutharika was elected, many businesses have begun to relocate to Lilongwe in recent years. It is expected that business meetings and international conferences will be increasingly held in Lilongwe, limiting the demand for such facilities in Blantyre.

²³³ Ministry of Tourism (2006). *Malawi Tourism Report 2006*, (Lilongwe: Government of Malawi).

²³⁴ University of Durham (June 2002). *Malawi Private Sector Partnerships, Tourism Sector Value Chain*,

²³⁵ Salad Nthenda, Malawi Tourism Association (March 18, 2008). Personal interview.

²³⁶ Katopola, Isaac, Ministry of Tourism (January 7, 2008). Personal interview.

²³⁷ Salad Nthenda, Malawi Tourism Association (March 18, 2008). Personal interview.

Appendix II. Foreign Direct Investment in Malawi

The principal destination for FDI in Malawi is agriculture, most notably tobacco and sugar. According to the World Investment Report 2007, published by the United Nations Conference on Trade and Development (UNCTAD), Malawi had US\$30 million of FDI inflow in 2006, compared to US\$7 million in 2003. Major sectors of investment other than agriculture include telecommunications, manufacturing, tourism, and mining.²³⁸ The bulk of FDI inflows come from the UK, the US, and South Africa, among others.

Figure 23: Largest Affiliates of Foreign Transnational Companies in Malawi, 2004

Company	Home Economy	Industry	Sales (US\$m)	Employees
A. Industrial				
Illovo Sugar Malawi	South Africa	Agriculture	98	10594
Transglobe Produce Exports	Mali	Food products, beverages and tobacco	3	1800 ²³⁹
Vaimore Paints	United Kingdom	Chemicals and chemical products	1	60 ^y
Limbe Leaf Tobacco Company Ltd.	United States	Food products, beverages and tobacco	-	5300 ²⁴⁰
Mandala	United Kingdom	Chemicals and chemical products	-	2000 ^y
Bata Shoe Company	Canada	Leather and leather products	-	380 ^y
B. Tertiary				
CFAO Malawi Limited	France	Wholesale trade	2417	300
Metro Cash & Carry Malawi	Germany	Distributive trade	47	1800 ²⁴¹
CELTEL Malawi Limited	Kuwait	Telecommunications	10	100
Gestetner	Japan	Wholesale trade	4	- ^z
Alexander Forbes Malawi Ltd.	South Africa	Other business activities	-	30 ^z
Continental Discount House Ltd.	Mauritius	Other business activities	-	22 ^z
The Cold Chain	Zimbabwe	Wholesale trade	-	10 ^z
Lipton Tea	United Kingdom	Wholesale trade	-	5 ^z
Hertz Corporation	United States	Automotive trade and repair	-	-
Macmillan Malawi Ltd.	Germany	Education	-	-
Maersk Malawi Ltd	Denmark	Other services	-	-
Fortland Malawi	France	Other services	-	-
Pricewaterhousecoopers	United States	Other services	-	-
Sara Lee Corporation	United States	Construction	-	-
Xerographics	United States	Wholesale trade	-	-
C. Finance and Insurance			Assets (US\$)	Employees
Commercial Bank	South Africa	Finance	161	763 ²⁴²
AON Malawi Ltd	United States	Insurance	-	-

Source: UNCTAD WID Country Profile: Malawi, 2006.

²³⁸ US & Foreign Commercial Service and Department of State (December 2005). *Country Commercial Guide: Malawi*.

²³⁹ 2002 data.

²⁴⁰ Estimate.

²⁴¹ 2003 data.

²⁴² 2000 data.

FDI incentives available in Malawi include the following:²⁴³

General Incentives

- Allowances of up to 40 percent for used buildings and machinery;
- 100 percent investment allowance on qualifying expenditure for new building and machinery;
- 50 percent allowance for qualifying training costs;
- Allowance for manufacturing companies to deduct all operating expenses incurred up to 25 months prior to the start of operations;
- Zero duty on raw materials used in manufacturing;
- Tax losses carry forward of up to seven years, enabling companies to take advantage of allowances;
- Additional 15 percent allowance for investment in designated areas of the country;
- Duty-free importation of buses with a seating capacity of 45 persons (including the driver) and above;
- Duty-free direct importation of building materials for factories and warehouses;
- Duty-free direct importation of goods used in the tourism industry, which includes building materials, catering and related equipment, and water sport equipment;
- Free repatriation of dividends, profits, and royalties.

Incentives for establishing operations in an Export Processing Zone (EPZ)

- Zero corporate tax rate;
- No withholding tax on dividends;
- No duty on capital equipment and raw materials;
- No excise tax on the purchases of raw materials and packaging materials made in Malawi;
- No value added tax.

Incentives for manufacturing in bond:

- Export allowance of 12 percent revenue for non-traditional exports;
- Transport tax allowance equal to 25 percent of international transport costs, excluding traditional exports;
- No duties on imports of capital equipment used in the manufacture of exports;
- No surtaxes;
- No excise tax or duty on the purchase of raw materials and packaging materials;
- A timely refund of all duties (duty drawback) on imports of raw materials and packaging materials used in the production of exports.

²⁴³ Malawi Investment Promotion Agency (2007). *Investor's Guide to Malawi 2007*, (Lilongwe: MIPA).

Appendix III. Investment Climate/ Opportunities/ Constraints

Investment Climate

According to the World Bank's "Doing Business" report for 2008, Malawi is ranked 127th out of 178 economies in ease of doing business, based on quantitative indicators analyzing business regulations (starting a business, dealing with licenses, employing workers, registering property, getting credit, protecting investors, paying taxes, trading across borders, enforcing contracts and closing a business) and the protection of property rights.²⁴⁴

Figure 24: Malawi's "Doing Business" Report Ranking, 2008

Doing Business 2008	Rank
Starting a Business	108
Dealing with Licenses	117
Employing Workers	90
Registering Property	87
Getting Credit	84
Protecting Investors	64
Paying Taxes	78
Trading Across Borders	161
Enforcing Contracts	135
Closing Businesses	135

Source: World Bank, *Doing Business 2008*.

Opportunities

Political Stability

Malawi has been relatively politically stable since its independence in 1964. There has been minimal violence during election and campaign periods. The presidential and legislative elections scheduled for 2009 are expected to be very closely contested by the three main parties: the DPP, the United Democratic Front (UDF) and the Malawi Congress Party (MCP).²⁴⁵

Liberalized Economy

The Government encourages both domestic and foreign investors to establish and own business enterprises in most sectors of the economy. Public enterprises compete equally with private entities with respect to market access, credit and other business operations.²⁴⁶ To facilitate investment activities in Malawi, MIPA was established in 1994 to oversee and facilitate investment processes for investors.

Bilateral, regional and multilateral trade and investments agreements

Malawi has the following multilateral and regional trade agreements:²⁴⁷

- **Common Market for Eastern and Southern Africa (COMESA):** COMESA has a potential market of 340 million people and a combined GDP of US\$170 billion. The nineteen member states within COMESA took steps to consolidate the Free Trade Area in preparation for the transition of the COMESA Free Trade Area into a Customs Union that came into force in December 2008.
- **Southern African Development Community (SADC):** The SADC region has a potential market of 199 million people and a combined GDP of US\$176 billion. Under SADC, Malawi is committed to

²⁴⁴ World Bank (2007). *Doing Business 2008*, (Washington: World Bank).

²⁴⁵ Economist Intelligence Unit (2008). *Country Profile 2008: Malawi*, (London: The Economist Intelligence Unit Limited).

²⁴⁶ Ibid.

²⁴⁷ Malawi Investment Promotion Agency (2007). *Investor's Guide to Malawi 2007*, (Lilongwe: MIPA).

reducing tariffs on intra-SADC trade progressively. Following the 28th SADC Summit in Johannesburg in August 2008, eleven of the 14 member states of SADC launched a Free Trade Area.

- **African Growth and Opportunities Act (AGOA):** AGOA offers duty and quota-free access to the US market of 303 million people for 1,835 products, in addition to the standard GSP program.²⁴⁸
- **Cotonou Agreement/Everything But Arms (EBA):** This initiative extends duty and quota-free access to the European Union market for all imports from Least Developed Countries, except arms. Minor variations apply to bananas, sugar and rice. Full liberalization will take place for these commodities in 2009.

In addition, bilateral trade agreements exist with South Africa, Zimbabwe, and Mozambique, and a customs agreement is in place with Botswana. Further trade agreements are currently under consideration with Zambia and Tanzania.²⁴⁹

The UK, the Netherlands, Denmark, South Africa, Norway, Sweden and Switzerland still maintain double taxation treaties with Malawi.²⁵⁰

FDI Incentives

Tax incentives in Malawi are enshrined in the main tax legislations that include the Customs and Excise Act, the Income Tax Act and the Export Processing Zones (EPZ) Act that came into force in 1995. All companies engaged exclusively in manufacturing for export may apply for EPZ status. As of December 2006, sixteen firms were operating under the EPZ scheme. Almost all of these companies are foreign owned. A manufacturing under bond (MUB) scheme offers slightly less attractive incentives to companies that export some, but not all, of their products.²⁵¹

Dispute Settlement

Malawi is a member of the International Center for Settlement of Investment Disputes (ICSID), and accepts binding international arbitration of investment disputes between foreign investors and the state if specified in a written contract.

Constraints

Landlocked: Limited Port Access & High Transportation Costs

Malawi's landlocked position results in high transport costs that constitute over 30 percent of the country's total import bill and result in a serious impediment to trade.²⁵² The shortest, cheapest trade routes are to the Mozambican ports of Nacala and Beira. Malawi's domestic road network is also inadequate, described by the World Bank in 2007 as 50 percent good, 30 percent fair and 20 percent poor.²⁵³

Poor Power & Water Infrastructure

The reliability of electricity supply in Malawi is poor. In 2004, the average company suffered power disruption for 50 days, compared to 48 days in Tanzania and 15 days in Zambia.²⁵⁴

²⁴⁸ AGOA.info. <http://www.agoa.info>.

²⁴⁹ Malawi Investment Promotion Agency (2007). *Investor's Guide to Malawi 2007*, (Lilongwe: MIPA).

²⁵⁰ DLA Piper US LLP (November 2007). *Millennium Cities Initiative: Report on the Regulatory Framework for Foreign Direct Investment, Malawi*, (New York: DLA Piper).

²⁵¹ US Department of State (2007). *2007 Investment Climate Statement - Malawi*, <http://www.state.gov/e/eeb/ifd/2007/80721.htm>.

²⁵² US & Foreign Commercial Service and Department of State (December 2005). *Country Commercial Guide: Malawi*

²⁵³ Economist Intelligence Unit (2008). *Country Profile 2008: Malawi*, (London: The Economist Intelligence Unit Limited).

²⁵⁴ Regional Program on Enterprise Development (June 2006). *The Malawi Investment Climate Survey*, (Washington, D.C.: World Bank).

High Interest Rates

Both nominal and real interest rates are among the highest in Africa. According to the IMF, the 2009 projected lending rate is 25.0%, compared to 13.5% in South Africa. The real cost of finance is a major obstacle for firms in Malawi.²⁵⁵

High Input and Production Costs

Because Malawi is heavily dependent on imports, the cost of inputs is expensive, as they frequently have to be brought in from other countries.

Low-skilled Workforce

According to the 2007-2008 Human Development Report published by the UN Development Program (UNDP), adult literacy was 64.1 percent in 2005.²⁵⁶ Malawi's overall ranking in the Human Development Report was 164th out of 177 countries.²⁵⁷ Skilled and semi-skilled labor is scarce in Malawi.

Limited Access to Capital and Technology

With less than 70 bank branches and only 24 ATMs in a country of about 12 million people, access to banking services remains low. The use of bank cards and telephone and internet banking, though growing, remains below the level observed in other emerging economies. Also, the microfinance industry in Malawi is relatively underdeveloped, with only 20 registered actors and six providing financial services as their core activity.²⁵⁸

Limited Domestic Market Size

Malawi's economy is relatively small with a GDP of US\$2.172 billion in 2006. Weak purchasing power enabled by low incomes result in limited domestic demand.²⁵⁹

Meeting International Standards

MBS is the national government body charged with the responsibility of setting, reviewing, monitoring, and implementing grades and standards. However, many of these are out of date and need to be updated to reflect changes in international standards. Capacity strengthening of the MBS, in line with private sector requirements for specific testing capabilities, would substantially mitigate current export constraints.²⁶⁰

Corruption

Malawi, with a score of 2.7 out of 10 (where 10 is considered "free from corruption") was ranked 118th out of 180 countries in the 2007 Transparency International Corruption Perceptions Index.²⁶¹ The new president Bingu wa Mutharika, has made the fight against corruption his priority. Since then, several senior ruling party officials and three former cabinet ministers have been charged on corruption offenses.²⁶²

²⁵⁵ Economist Intelligence Unit. *EIU DataServices*, <https://eiu.bvdep.com/frame.html>.

²⁵⁶ Malawi's overall Human Development Index ranked 164 out of 177.

²⁵⁷ UNDP (2008). *2007/08 Human Development Reports*, http://hdrstats.undp.org/countries/data_sheets/cty_ds_MWI.html.

²⁵⁸ Regional Program on Enterprise Development (June 2006). *The Malawi Investment Climate Survey*, (Washington, D.C.: World Bank).

²⁵⁹ Malawi Investment Promotion Agency (2007). *Investor's Guide to Malawi 2007*, (Lilongwe: MIPA).

²⁶⁰ Toomey, David C., Patricia Aust Sterns, and Charles Jumbe (2001). *The Impact of Improved Grades and Standards on the Export Potential of Targeted Commodities in Malawi, PFID-F&V Report*, (East Lansing, MI: Michigan State University and United States Agency for International Development).

²⁶¹ Transparency International (2007). *Corruption Perceptions Index 2007*, http://www.transparency.org/policy_research/surveys_indices/cpi.

²⁶² The former Minister of Education is serving a five year prison sentence and the other cases are still pending in court.

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