



cutting through complexity™

Tabora, Tanzania

Potential opportunities for investors

June 2011

www.kpmg.com



Terms of reference

This report has been prepared by KPMG BPA Co. Ltd. a Japanese partnership and a member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity. The information contained herein is of a general nature and is not intended to address the circumstances of any particular individual or entity. Although we endeavor to provide accurate and timely information, there can be no guarantee that such information is accurate as of the date it is received or that it will continue to be accurate in the future.

In preparing this document we have relied upon and assumed, without independent verification, the accuracy and completeness of various sources of information, some of which have been derived from public sources. Details of the sources that we have used are given in our report. We set out a bibliography of our interview sources in Appendix 2. KPMG in Japan accepts no responsibility or liability to any party in connection with such information or views.

Our core fieldwork and research was performed in May 2010 and was updated in January 2011. We have not undertaken to update our report for events or circumstances arising after these dates.

Appropriate professional advice should be sought to undertake a more specific examination of the particular circumstances applicable to a potential investor. The contact details of KPMG firms' professionals who could assist in this regard are given at the back of this report.

Acknowledgments

KPMG in Japan would like to thank the Millennium Cities Initiatives (MCI) for the opportunity to prepare this report to support its valuable project. We would also like to thank the numerous entities and people and acknowledge their contribution in the preparation of this report. In particular we would like to recognize the valuable input from Cameron Gwinn and Tanya Shariff, Transactions and Restructuring Services, KPMG in the US.

Foreword

Tabora is the capital city of the Tabora Region located in Western Tanzania. The region benefits from agriculture, livestock and a wealth of natural resources. Tobacco and cotton are the primary cash crops for farmers in the region.

Its location, climate and safety make Tabora attractive to investment, in particular in agriculture and agro-processing. Concrete opportunities exist in beekeeping and the production of honey, sunflower seeds and sunflower oil. Other opportunities were identified in the hotel sector and in milk and milk-processing.

Investment in and around Tabora can help drive the socio-economic transformation and although investors will need to make a well weighted decision, our belief is that there is long term potential in this area. To this extent, we hope this work will lead to sustainable poverty eradication and securing the future of many hundreds of people through work and enterprise.

Lord Hastings of Scarisbrick CBE
KPMG Global Head of Citizenship and Diversity

Professor Jeffrey D. Sachs
Director of The Earth Institute at Columbia University



The Millennium Cities Initiative (MCI), a project of The Earth Institute at Columbia University, launched by the Institute's Director, Professor Jeffrey D. Sachs in 2006. MCI seeks to assist, through research and policy analysis, selected mid-sized cities across sub-Saharan Africa to achieve the Millennium Development Goals led by its co-directors, Dr. Susan Blaustein and Dr. Karl P. Sauvant, MCI, helps the cities to arrive at integrated City Development Strategies. Part of this effort is to demonstrate that more investment, including foreign direct investment, can be attracted to these cities, with the resulting employment and economic growth benefits. The staff responsible for working with KPMG on this report were Karl P. Sauvant, MCI Co-director and Executive Director of the Vale Columbia Center on Sustainable International Investment and Joerg Simon, MCI Senior Investment Advisor.

Further information on MCI activities can be accessed via www.mci.ei.columbia.edu

Executive Summary



At the crossroads of development

Tabora is the capital city of the Tabora Region located in Western Tanzania. The region benefits from agriculture, livestock and a wealth of natural resources. Tobacco and cotton are the primary cash crops for farmers in the region.

The Government of Tanzania has shown its commitment to economic development as detailed in its five year National Strategy for Growth and the Reduction of Poverty (MKUKUTA II 2010/11–2014/15) and through the Kilimo Kwanza (Agriculture First) policy which specifically focuses on agricultural development. Tanzania is a member of the East African Community and the Southern African Development Community regional intergovernmental organizations, both of which aim to improve economic, political and social stability and encourage growth through increased competitiveness, trade and investment.

The Millennium Cities Initiative (MCI) has focused on Tabora to lead economic growth in Western Tanzania. Tabora's resources and location place the city in a strategic position for new investment, trade and business development. Its location in the heart of Western Tanzania and on the central railroad between Dar es Salaam, Kigoma and Mwanza provides an opportunity as a trading corridor which can give Tabora an advantage over other cities.

In the past the Tabora Region has not benefited from as much investment and growth as other regions in Tanzania. For the region to reach its full potential, the government's commitments to support development and improve energy, road and rail access as highlighted in this report will need to be accelerated.

A number of attractive opportunities

This report discusses some of the opportunities available for private investment in Tabora and the challenges that investors may face.

An evaluation of the investment climate and resources in Tabora has revealed several opportunities which include:

Honey processing: Tabora has a solid history and reputation for producing honey. Investment in honey production and processing will increase efficiency and improve quality with a future potential for organic certification.

Edible oil processing: There is an increasing demand for cooking oil in the Tabora Region, Western Tanzania and other East African nations. Investment in sunflower oil production locally could provide competition against imported oil.

In addition, a number of longer term investment opportunities have been summarized in this report.

Investment Opportunities

Several opportunities in Tabora were evaluated for investment purposes against criteria such as local and international demand and supply, competition, costs and barriers. Honey and edible oil were found to be the most attractive for investment and are discussed in greater detail in this report. Tourism, biofuel, dairy and cotton and timber processing were identified as potential longer term investment opportunities. Tourism, biofuel and dairy processing have been highlighted in this report.

| Industry | Favorable factors |
|-------------------|--|
| Honey processing | <ul style="list-style-type: none"> Tabora is the largest honey producing region in Tanzania Rising demand for honey and honey products worldwide The cooperative society approach for beekeepers has proved successful |
| Edible oil | <ul style="list-style-type: none"> Demand in domestic market Availability of suitable land The Millennium Villages Project is working to promote sunflower seed as an alternative cash crop to tobacco in the Mbola villages |
| Tourism | <ul style="list-style-type: none"> Presently the region has only one quality hotel suitable for international tourists Local historic sites include Dr David Livingstone's house Access to a number of game reserves including Ugalla River Game Reserve |
| Biofuel | <ul style="list-style-type: none"> Availability of land suitable for growing Jatropha plants Market and social demand for cost effective transportation and sustainable energy sources Generation of carbon credits could contribute to the profitability of Jatropha biodiesel |
| Dairy | <ul style="list-style-type: none"> Demand from domestic and regional markets Region has one of the largest headcounts of cattle in Tanzania Opportunity for local processing facility |
| Cotton processing | <ul style="list-style-type: none"> Raw cotton is produced in the region and there is an opportunity for large scale cotton processing facilities |
| Timber processing | <ul style="list-style-type: none"> Largest forest reserve in Tanzania which accounts for 45 percent of total regional land area Domestic demand for quality wood products such as furniture is outpacing supply |

KEY

 Medium term investment opportunities

 Long term investment opportunities

Challenges

- Training in modern harvesting, packaging and storage practices is required to produce quality honey and higher yields
- Local controls are needed to separate honey production from smoke of nearby tobacco curing
- Lack of good infrastructure creates both seasonal and transportation cost issues
- Unstable supply of sunflower seeds due to competition among cash crops
- Lack of cooperative societies
- Farmers are focused on short term gain and profit
- Shortage of trained hotel staff
- Tourist destinations such as game reserves can be difficult to access in the rainy season
- Biofuel is at an early development and research stage
- The cost effectiveness and efficiency of current methods are controversial
- National government policy regarding biofuel is uncertain
- Overgrazing near the limited number of watering points restricts herd quantity and quality
- Lack of access to knowledge and facilities capable of controlling or preventing animal diseases
- Competition for raw materials from ginneries in Shinyanga, Mwanza and Arusha
- Lack of good infrastructure impacts transport costs for export market
- Government permits on harvesting timber restricts supply and therefore access to markets





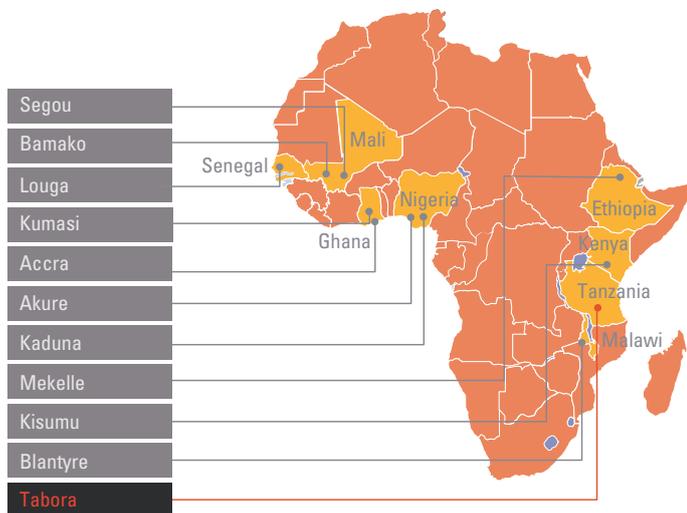
Contents

| | |
|---|----|
| An Introduction to MCI | 10 |
| An Introduction to Tanzania | 11 |
| Positive Investment Trends | 12 |
| Doing Business in Tanzania | 13 |
| An Introduction to Tabora | 15 |
| Opportunities in Tabora | 17 |
| Honey | 18 |
| Edible Oil | 25 |
| Long Term Investment Opportunities | 31 |
| Tourism | 32 |
| Biofuels | 34 |
| Dairy Production | 36 |
| Conclusion | 37 |
| Appendices | 39 |
| Appendix 1: KPMG Interview Program Participants | 40 |
| Appendix 2: Secondary Research | 41 |

An Introduction to Millennium Cities Initiative

The Millennium Cities Initiative (MCI) aims to assist a number of sub-Saharan African cities in reaching the Millennium Development Goals (MDGs) by, among other things, attracting more foreign direct investment

Millennium cities



| Millennium city | MV cluster | Country |
|-----------------|------------|----------|
| Accra | Bonsaaso | Ghana |
| Akure | Ikaram | Nigeria |
| Bamako | Tiby | Mali |
| Blantyre | Mwandama | Malawi |
| Kaduna | Pampaida | Nigeria |
| Kisumu | Sauri | Kenya |
| Kumasi | Bonsaaso | Ghana |
| Louga | Potou | Senegal |
| Mekelle | Koraro | Ethiopia |
| Segou | Tiby | Mali |
| Tabora | Mbola | Tanzania |

Source: Millennium Cities Initiative

The MCI is focused on the capitals of the regions where the Millennium Villages Project (MVP) is enabling farmers to transition from subsistence farming to commercial agricultural and non-agricultural activities.

The MCI aims to engender a climate in which investment, especially foreign direct investment, can thrive, thereby creating employment, stimulating enterprise development and fostering economic growth. As such, the MCI is intending to accelerate the attainment of some of the MDGs within selected cities in sub-Saharan Africa.

The experience gained in attracting investment and developing business in the Millennium Cities is complementing the needs assessments carried out in a wide array of social sectors. As a result of these efforts, the Millennium Cities will be enabled to generate integrated city development strategies that are explicitly predicated on achieving the MDGs.

The MVP in Tanzania has already made considerable progress in the area of agriculture development, health and education. The MVP cluster in Tanzania is located about 30 kilometers from Tabora. One of the ambitions of the MVP team is linking small farmers efficiently to markets and thus encouraging the move from subsistence farming to more commercial farming generating sustainable economic growth.

The Tanzania Growth and Development Strategy 2010–2015, commonly known as MKUKUTA, has been formulated by the Government of Tanzania with the aim of achieving sustainable economic growth in line with the MDGs by promoting foreign private investment in sectors such as tourism, mining and manufacturing. Secondly, the Kilimo Kwanza (Agricultural First) policy focuses on agricultural development in the country, specifically on growth from subsistence to commercial farming. The MCI is inherently aligned to the plans of the Government of Tanzania.

An Introduction to Tanzania

Tanzania is the thirty-first largest country in the world covering 945,000 km² and its population is estimated to be over 43 million with a growth rate of 2.9 percent¹

History and politics

Tanganyika (the mainland of Tanzania) gained independence from British rule in 1961, followed by Zanzibar in 1963. In 1964, together they formed the United Republic of Tanzania (Tanzania).

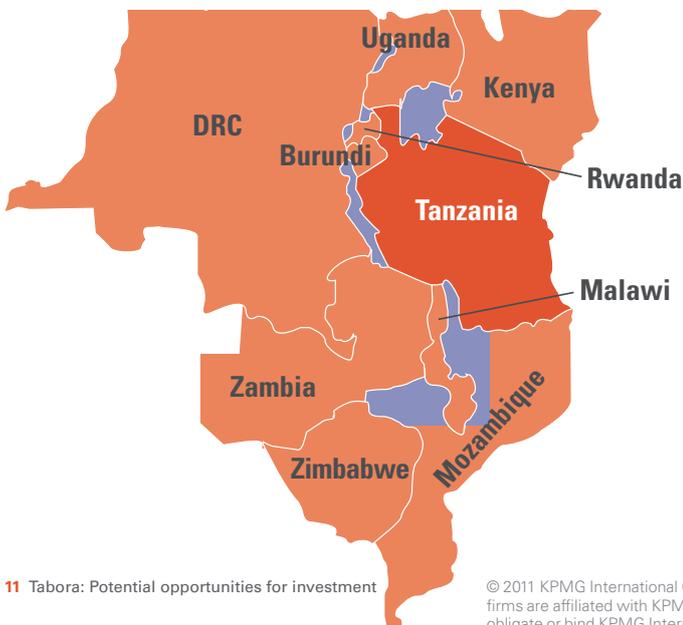
Tanzania is a unitary republic comprised of 26 regions. Since 1996, the administrative capital has been in Dodoma. However, Dar es Salaam is the business and economic capital of the country. Dar es Salaam contains most of the government offices and is the seaport for Tanzania and its neighboring landlocked countries.

Kiswahili and English are both official languages in Tanzania; however, English is the primary language for conducting business in Tanzania.

Tanzania has a stable political climate. President Jakaya Kikwete was elected to a five-year term in November 2010. Tanzania is a member of international and regional organizations including the East African Community (EAC) and the Southern Africa Development Community (SADC).

Tanzania borders Kenya and Uganda to the north, Democratic Republic of Congo (DRC), Rwanda and Burundi in the west and Zambia, Malawi and Mozambique in the south.

Map of Tanzania with neighboring countries

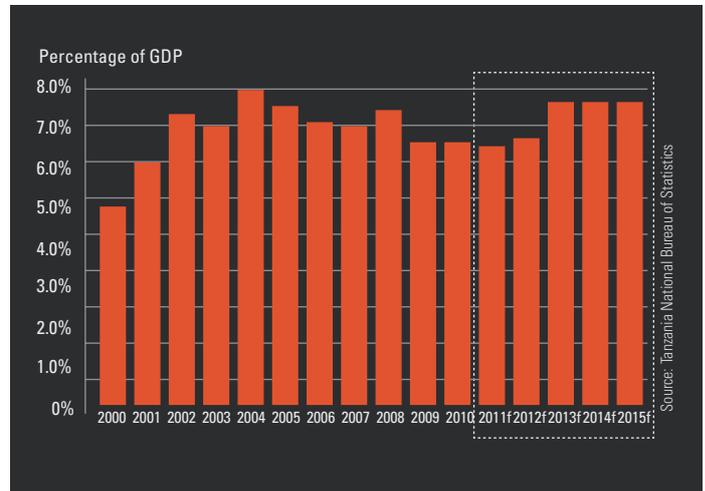


Economics

In 2010, GDP growth was 6.5 percent (approximately US\$22.6 billion²) and inflation was 10.5 percent.

The world economy suffered significantly at the end of the last decade; however, comparatively developing economies and specifically the East African Great Lake Countries (Burundi, DRC, Kenya, Rwanda, Tanzania and Uganda) performed better than many more developed economies. Tanzania is one of the fastest growing African economies in the 2000s.

Tanzanian gross domestic product, constant prices



1 Source: International Monetary Fund, World Economic Outlook Database 2011
2 1US\$ is equal to 1,340 TSH

Positive Investment Trends

Tanzania has a positive attitude to foreign direct investment (FDI) and development

The Government of Tanzania actively encourages investment by providing both financial and non-financial incentives under several major legislative initiatives for attracting investors, including the Tanzania Investment Act 1997, the Export Processing Zones Act 2002, the Mining Act 1998, Petroleum Exploration and Production Act 1980, Special Economic Zones Act 2005 and the Economic Processing Zones Act 2006.

Tanzania Investment Center

The Tanzania Investment Center (TIC) is a one-stop facilitative center established by the Tanzanian Investment Act of 1997. The TIC is the primary government agency set up to support all investment inquiries, facilitate new business ventures and promote and encourage foreign investment in Tanzania.

Areas of investment promoted by the TIC include agriculture, mining, tourism, telecommunications, financial services, energy and transportation infrastructure.

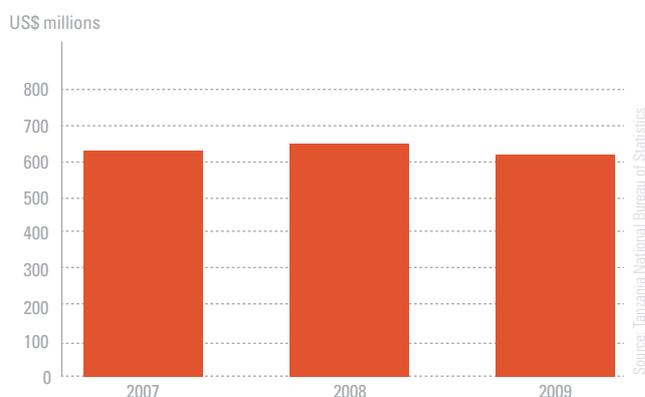
TIC roles and responsibilities

- Assist in establishment of enterprise, for example, incorporation and registration of enterprises
- Assist in obtaining necessary licenses, work permits, visas, approvals, facilities or services
- Reducing administrative barriers confronting both local and foreign investors
- Promote both foreign and local investment activities
- Secure investment sites and assist investors in establishing Export Processing Zone (EPZ) projects
- Grant certificates of incentives, investment guarantees and register technology agreements for all investments over US\$300,000 for foreign investors and US\$100,000 for local investors
- Provide and disseminate up to date information on existing investment opportunities, benefits or incentives available to investors
- Assist all investors whether or not registered by TIC

Representatives from the following government agencies are housed at the TIC for ease of access to investors:

- Ministry of Lands, Housing and Human Settlement Development
- Tanzania Revenue Authority (TRA)
- Immigration Department
- Ministry of Labor, Employment and Youth Development (Labor Department)
- Ministry of Industry, Trade and Marketing (Directorate of Trade)
- Business Registration and Licensing Agency (BRELA)

Tanzanian foreign direct investment inflows

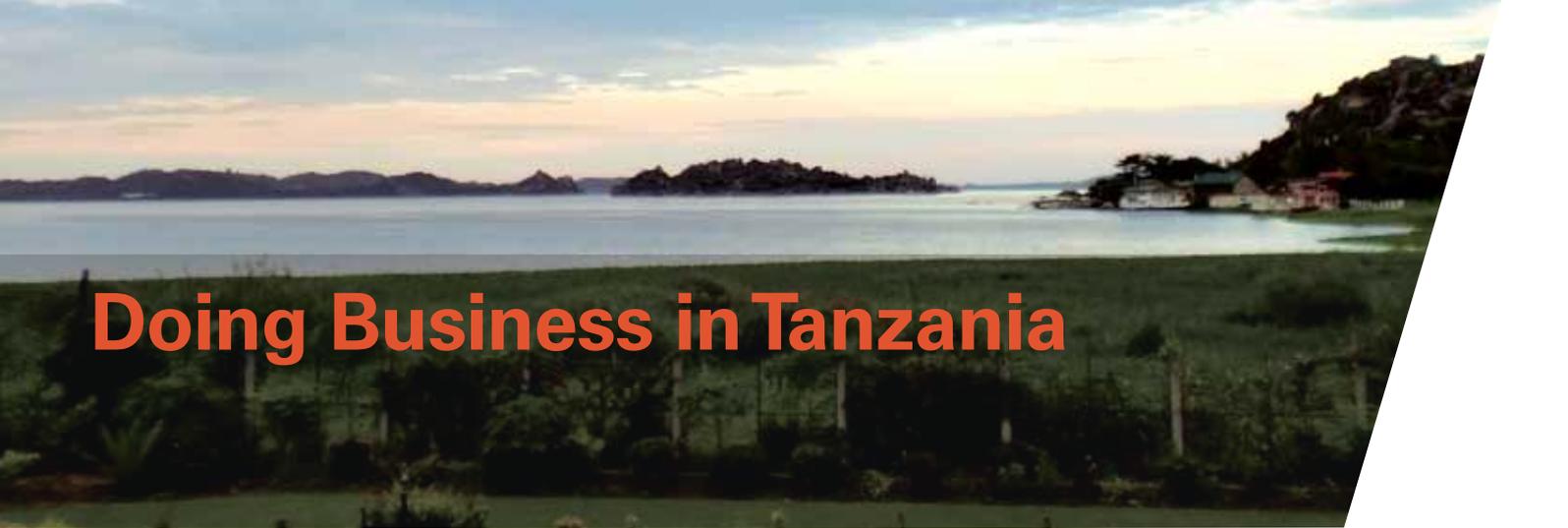


NSGRP II/MKUKUTA II

MKUKUTA II will be implemented for five years 2010/11–2014/15 and is designed to focus nationally on the role of governance and growth in poverty reduction. The strategy provides a platform for all stakeholders — national and international, public and private sectors and the government — to work together to promote social and economic development.

MKUKUTA II is built on the following four fundamentals:

- Efficient use and development of factors of production, including human capital and resources
- Strengthening and establishing well functioning institutions and markets
- Provision of infrastructure
- Ensuring good economic governance



Doing Business in Tanzania

Political stability

Tanzania benefits from a long and stable political environment that has allowed the government to focus activities on improving its economic performance and growth. While the global financial crisis and the drought in 2008/09 led to economic setbacks, the Tanzanian economy has continued to grow. However, the government will need to continue its reform programs, laws and regulations to encourage investment and create an environment that makes doing business easier and less costly in Tanzania. Access to investment opportunities has been improved by the TIC and the Business Environment Strengthening for Tanzania (BEST) programs designed to improve the investment climate by reducing regulatory and administrative constraints on private sector operations. There are also a number of tax exemptions for businesses setting up in the EPZs.

Land availability and acquisition

The land in Tanzania is controlled by the state. However, under the Land Act of 1999, the government opened opportunities for investors to acquire land. Under the Act, investors can acquire land by a granted right of occupancy or a derivative right, or obtaining a sub-lease from the private sector for a period of five to 99 years. While laws are in place to make access to land easier, in reality local disputes over land can disrupt development. The TIC can assist foreign investors with navigating the process of leasing or purchasing land.

Electric power supply

The supply of power is one of the biggest problems faced by Tanzanian businesses. Tanzania's reliance on hydro-electric power has led to power-rationing episodes which is highly disruptive to business capacity. Access to the grid and reliability of power flow needs to significantly improve across the country to enhance the growth of business.

Over the past decade, a number of projects both by the government and international donors have focused on improving access to electricity especially to the more rural areas. The government has plans to develop new methods of power generation; however, these projects will take time to implement.

Tanzania benefits from a long and stable political environment that has allowed the government to focus activities on improving its economic performance and growth



Access to finance

The government has implemented a series of financial sector reforms since 1991 and the financial sector in Tanzania has seen significant growth. Access to finance is still relatively low and expensive especially for small-scale and rural businesses. Interest rates can run to more than 20 percent for local companies and up to 15 percent for international companies.

Infrastructure and transport

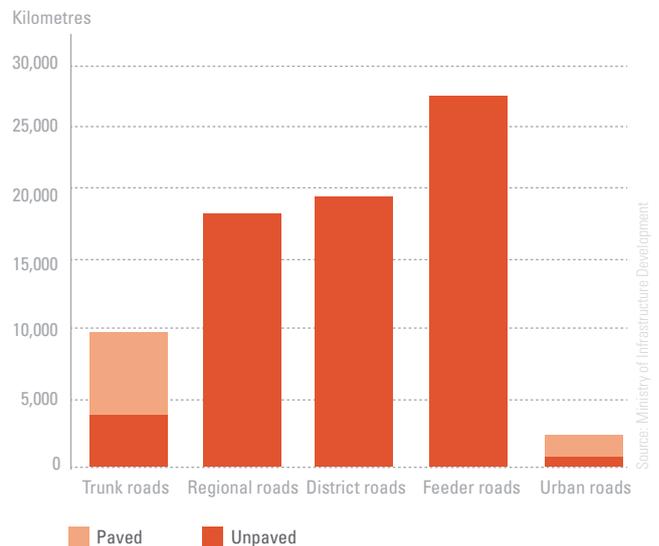
Lack of good infrastructure is one of the biggest barriers to business growth especially in the rural areas. Investment in the transport sector will significantly improve the attractiveness of Tanzania to investors across all sectors. Recent increases in traffic have led to an even greater demand for new roads and the upgrade of existing ones. There is a vast network of dirt roads but tarmac roads are limited.

The rail network is fairly extensive but poorly maintained. Although the railroad was previously privatized, the government is implementing measures to gain more control of the rail service to improve service and reliability.

There are three international airports as well as many domestic airports and basic landing strips throughout Tanzania. However, most locals cannot afford to use air transport and therefore demand at current prices is not high enough to increase flights.

Tanzania has a history steeped in the use of coastal and lake waterways. In the central areas of the country, lakes and rivers are regularly used for transportation of goods and people. Lake Tanganyika in Western Tanzania and Lake Victoria in Northern Tanzania provide access to EAC and SADC trading partners.

Paved and unpaved roads in Tanzania, December 2008



Labor

Eighty percent of the working population is dependent on rural and peri-urban subsistence farming. The government and NGOs have supported the development of cooperative societies among groups of these farmers. Over the past decade the government has made significant progress to encourage and increase the number of children completing both their primary and secondary education. Businesses that invest in training and development programs will benefit from an increasingly educated and skilled labor force. Businesses set up in the EPZs can benefit from work permits for management and technical employees if local skills are not available.

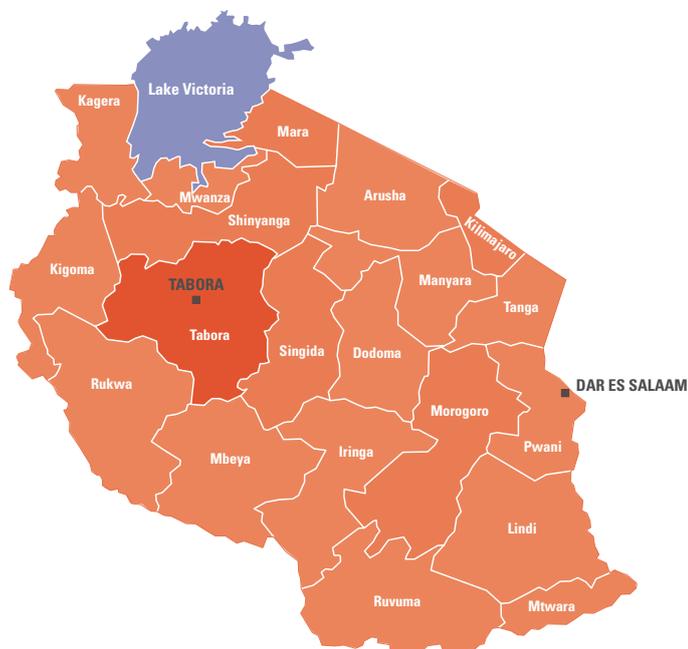


Over the past decade the government has made significant progress to encourage and increase the number of children completing both their primary and secondary education

An Introduction to Tabora

The Tabora Region is located in the mid-western part of the Tanzania mainland and borders five regions. The region has an estimated population of just over two million and a land area of 76,000 km₂

Regional Map of mainland Tanzania



Doing business in Tabora

The Tabora Region is bordered by Shinyanga (north), Shingida (east), Mbeya and Rukwa (south) and Kigoma (west). The region is divided into five administrative districts include Igunga, Nzega, Sikonge, Tabora and Urambo. The region has not been targeted for investment and development in Tanzania and therefore is ripe for investment.

The region is centrally located and has the potential to serve as a strategic hub of mid-western Tanzania through its borders. In the past Tabora was a regional hub in Tanzania. Due to its central location on the railroad, the city has potential to be a hub once again with access to export markets in Dar es Salaam, Kigoma (on Lake Tanganyika) and Mwanza (on Lake Victoria).

Land and resources

The region has traditionally been heavily reliant on agricultural farming and livestock keeping. Natural resources are in abundance and include forest land, wildlife, lakes and rivers, and a renowned honey bee population.

While Tabora is not isolated from the challenges faced by Tanzania, Tabora has the potential to be a trading hub for Western Tanzania as railway and road networks improve. The National Bureau of Statistics estimates the population of Tabora Region is approximately 2.2 million. The population of the Tabora Region is growing with half characterized as young. The City of Tabora is known for its secondary and post-secondary schools. There is a good supply of un- and semi-skilled labor; however, investment would be needed to train locals in skilled positions.

Electric power supply

Electric supply in the Tabora Region is considered more stable than some other regions. Due to the reliance on hydroelectric power however, outages can be an issue, especially during the dry season. Investment in energy and power supply would attract more business to the region.

Infrastructure and transport

The poor road conditions and unreliable rail network supporting Tabora pose significant barriers to business development as they increase transportation costs. Improvements in infrastructure links are underway and more are expected which will make Tabora more competitive. The government plans to take back the control of the railway network and increase maintenance and thus reliability.

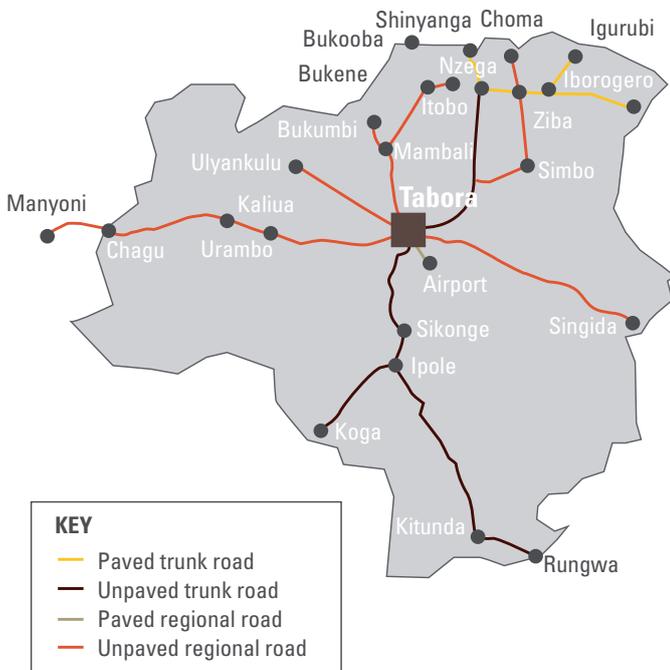
The central government has agreed to the refurbishment and pavement of roads connecting Tabora and Nzega (116km), Manyoni (245km), and Urambo to Kaliua (169km). The road linking Tabora to Ipole to Koga (164km) and Ipole to Rungwa (172km) is under construction. The refurbishment of the runway of the airport is scheduled to be completed within five years.

The commitment and delivery of an improved road and rail network is imperative to the attractiveness of the Tabora Region.

Water supply and irrigation

Water shortages are a daily problem and water for industrial use is limited. Local businesses need to secure water storage facilities. For agricultural purposes, the potential of irrigation is limited due to lack of stable water sources such as permanent rivers and lakes. The modernization of irrigation systems and storage systems will improve industrial and agricultural efficiency.

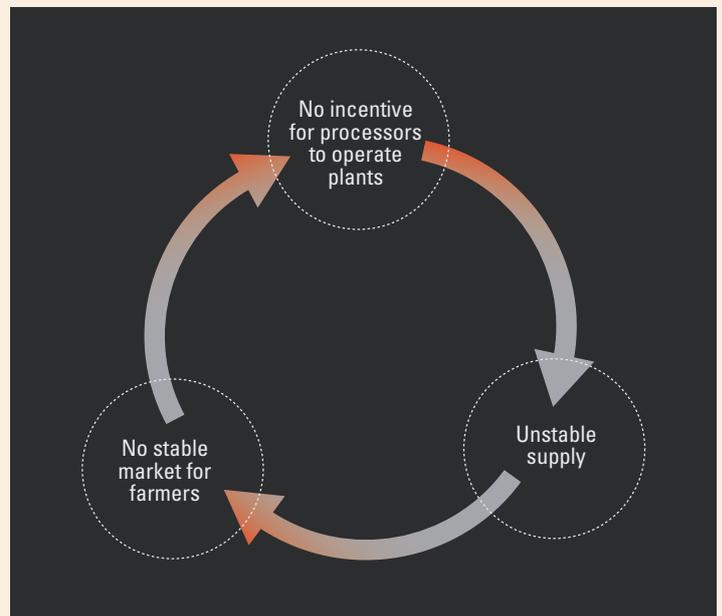
Tabora Region: Road network



Vicious cycle: Unstable supply leads to further unstable supply

Unstable supply is one of the biggest factors for the lack of processing facilities in Tabora. Moreover, there is a vicious cycle of lost value creation in the region due to unstable supply. Farmers tend to choose immediate cash rather than long term profit, and plant crops based upon the market price of the previous year. However, the market price of crops fluctuates every year which causes the unstable supply of particular crops.

As processors cannot expect stable supply from the region, there is limited incentive to operate processing plants in Tabora. As a result, farmers have no access to consistent crop buyers, and in general, Tabora loses value creation opportunities.



The commitment and delivery of an improved road and rail network is imperative to the attractiveness of the Tabora Region



Investment Opportunities in Tabora

Honey Market Opportunity

The honey found in Tabora is both distinctive and in plentiful supply, presenting an attractive opportunity for honey processing in the region. Investors with modern equipment could access domestic and export markets with a quality product

Supply

The Food and Agriculture Organization (FAO) of the UN estimated the global honey production in 2008 was 1.5 million tons. In a 2010 report by Global Industry Analyst Inc¹ the global honey market is expected to approach two million tons in 2015.

Traditionally China, Argentina and Mexico are responsible for over half the export market in honey and the EU, US and Japan are the main importers.² Under the radar of global market estimates, there is small scale production and trade in honey through Africa, the Middle East and Asia.

There is an increasing demand from the health-conscious market for honey based products. It can be marketed as a more wholesome alternative to artificial sweeteners and is used for a variety of consumer products from baby food to high-end cosmetics and creams.

In Tanzania, production of honey is steadily increasing. Extension services from the government and NGOs provide training to beekeepers on the use of modern hive and harvesting practices which increase output, quality and efficiency.

Tabora honey

Tabora honey is produced by bees from the Miombo woodlands and is a dark brown honey. The climate and terrain conditions present in Tabora produce honey of a high quality that is sought-after, both nationally and internationally.

Internationally, Africa, the Middle East, Europe and the US are all potential markets but also there is a local demand in Tanzania. The current market consists of high income households in the cities and restaurants and hotels that cater to tourism.

Tanzanian export of bee products³

| Year | Wax | | Honey | |
|------|------|---------------|-------|---------------|
| | Tons | Value (TSHs) | Tons | Value (TSHs) |
| 2005 | 288 | 1,166,384,698 | 465 | 544,513,855 |
| 2006 | 331 | 1,855,703,156 | 316 | 491,945,014 |
| 2007 | 414 | 2,360,210,620 | 370 | 521,265,423 |
| 2008 | 502 | 2,865,405,326 | 430 | 605,617,695 |
| 2009 | 297 | 1,956,533,416 | 621 | 1,222,852,355 |

1 Honey: A Global Strategic Business Report published February 2010 by Global Industry Analyst

2 Bees and their role in forest livelihoods, FOA Non Wood Forest Products series, 9

3 Wildlife Department, The Economic Survey, Tanzania, June 2009

4 Tanzania national websites

5 Food and Agriculture Organization (FAO) of the United Nations, Tanzania National Websites and KPMG interview program

Potential market share

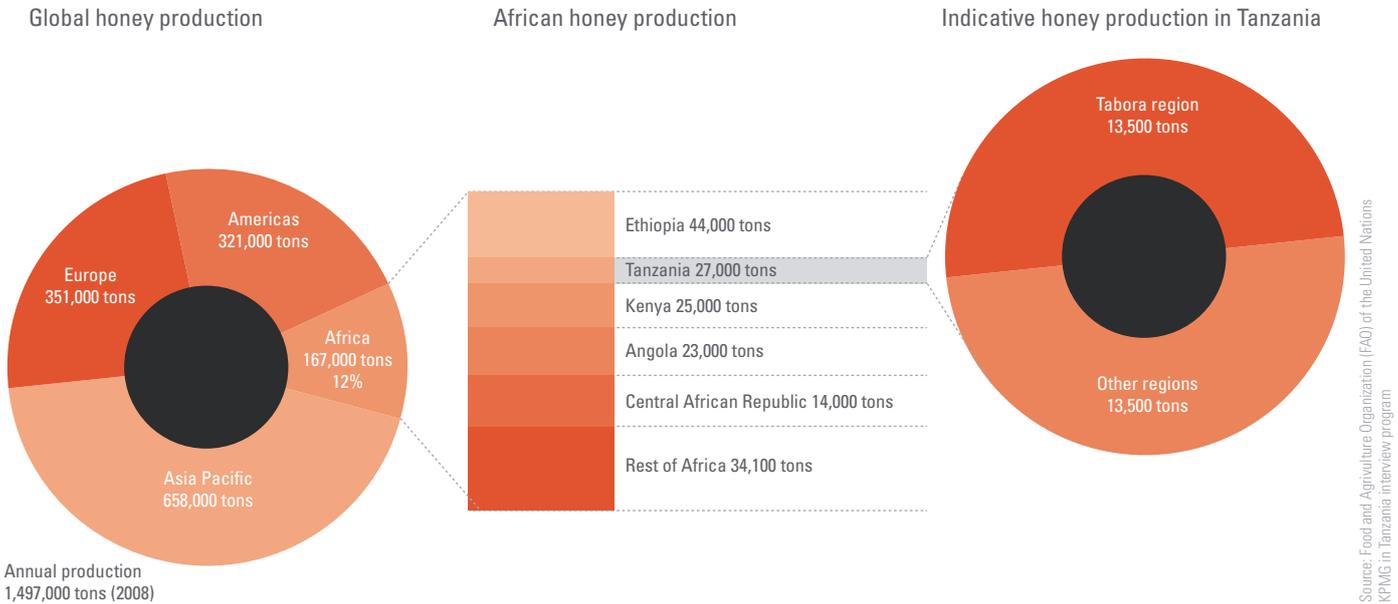
African countries produce 12 percent of the global honey supply. With conditions highly suitable for producing honey, there is potential to increase African market share by:

- Utilizing more efficient bee keeping, harvesting, storage and production methods
- Introducing technical expertise and knowledge
- Accessing international markets as certified high quality honey producers

Tanzania boasts the second largest production volume of honey in Africa and has about 33.5 million hectares of forests and woodlands.⁴ The Miombo woodlands offer the natural ecosystems and resources which enable high quality honey supply.

Based on the FAO report,⁵ the Tabora Region is responsible for 13,500 tons of honey per annum or 50 percent of Tanzania's supply of honey per annum.

Honey supply chain



Tanzania boasts the second largest production volume of honey in Africa and has about 33.5 million hectares of forests and woodlands



Processing

The natural resources and climate of Tabora are conducive to setting up a local processing facility to produce high quality honey.

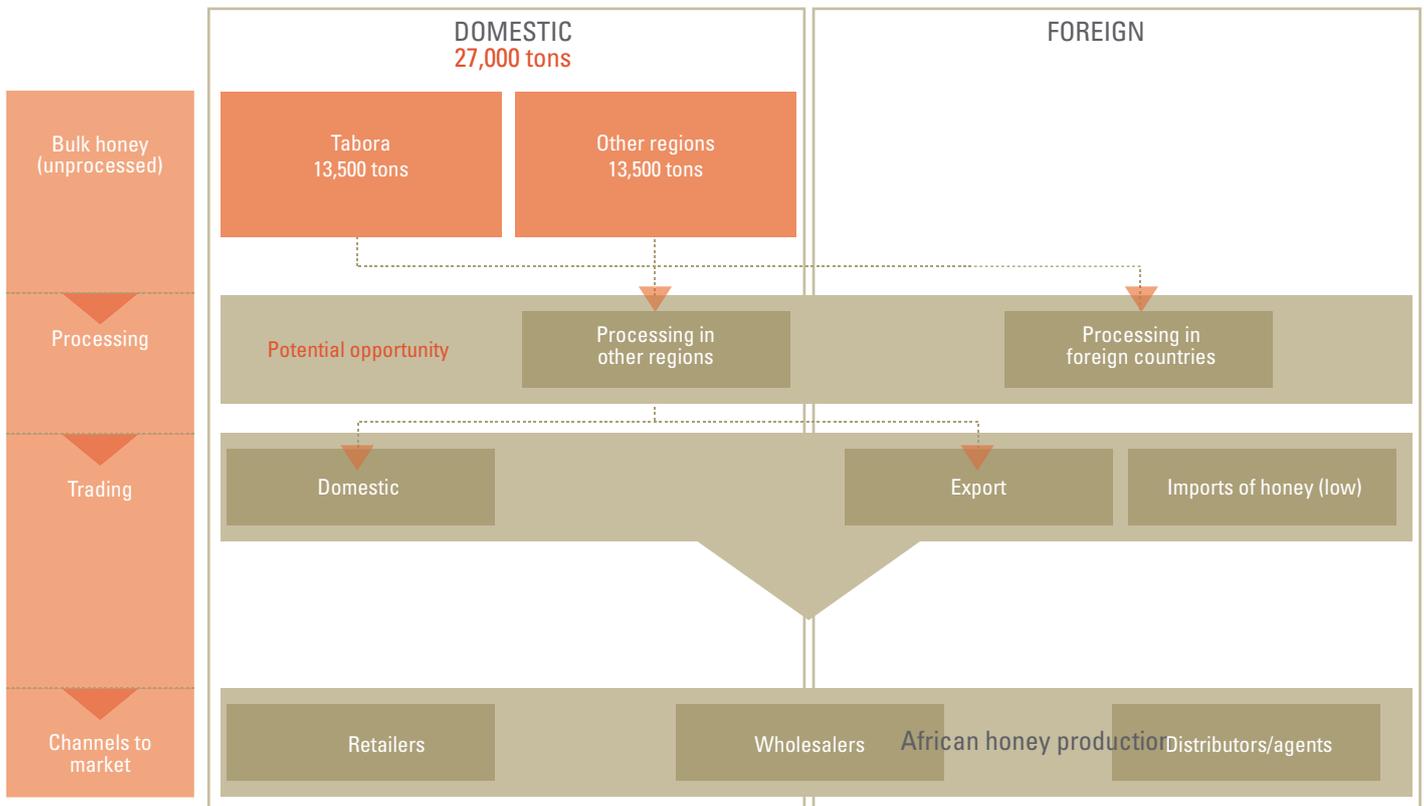
The role of processing

The Tabora Region produces the largest volume of bulk (unprocessed) honey in Tanzania. There are however very few local processing facilities for honey. Almost all the bulk honey is sold to independent traders who sell to processing companies in other regions within Tanzania or in foreign countries.

The transfer of bulk honey between small farmers and processing facilities can lead to reduced quality. To maintain its quality, honey needs to be maintained at a certain temperature and moisture content during storage and transportation.

A processing facility in Tabora could entice beekeepers to increase supply and its close proximity to the source would reduce the risk of a deterioration of quality.

Estimated honey production in Tanzania



Source: Food and Agriculture Organization (FAO) of the United Nations
KPMG in Tanzania interview program

The economic impact

Tabora has the opportunity to be the hub of honey production for Tanzania and the development of honey processing facilities in the Tabora Region could have significant local economic impact.

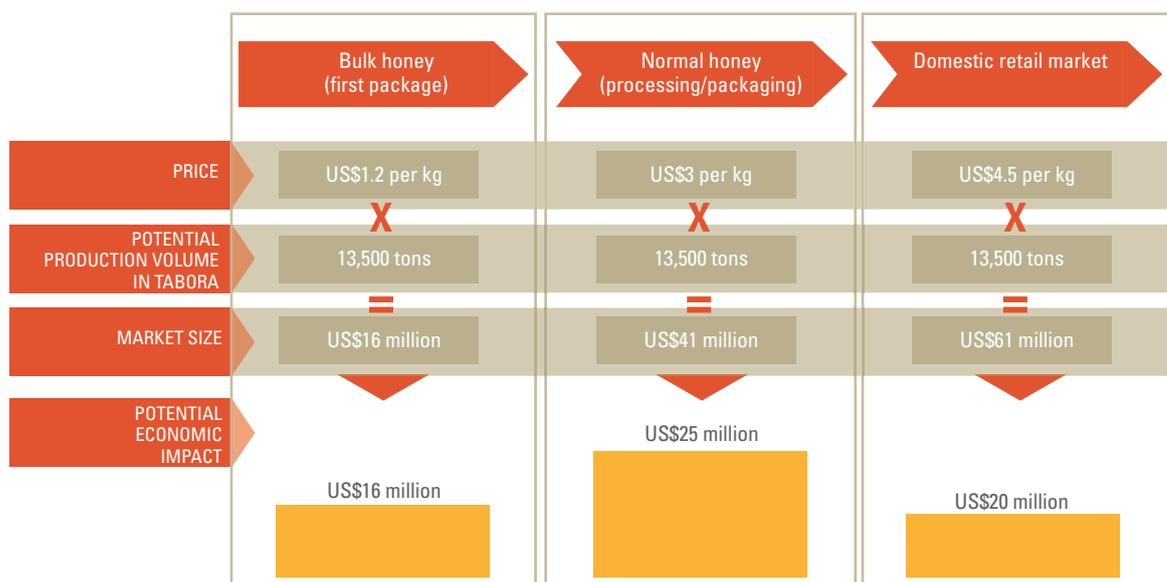
On the basis that the bulk honey market in Tabora is estimated at approximately US\$16 million, investing in honey processing facilities could significantly improve the obtained price.

Basic assumptions of economic impact

Economic impacts of each process is analyzed as follows:

- **Bulk honey (unprocessed):** Economic impact shows the potential market value of the production of bulk honey
- **Processing:** Economic impact shows the value added of producing first stage processed/packaged honey versus the market value of producing and selling bulk honey
- **Domestic/export market:** Economic impact shows the value added of processing honey for the domestic/export retail market versus the market value of first stage processed/packaged honey

Example model of the honey production value chain using the production volume of bulk honey in the Tabora Region



Current market value for the bulk honey = US\$16million

Potential market value for first stage processed/packaged honey = US\$41 million and the economic benefit of moving from bulk honey to first stage processed/packaged honey will be US\$25 million (minus costs)

Potential market value for the domestic/export retail market = \$61 million and the economic benefit from moving from first stage processed/packaged honey to domestic/export retail market will be US\$20 million (minus costs)

Source: Food and Agriculture Organization (FAO) of the United Nations
KPMG in Tanzania interview program



NGOs and the MVP are actively encouraging the move from tobacco to other cash crops

Opportunity in honey by-products

Honey processing by-products such as beeswax, propolis, pollen and royal jelly are used in cosmetics, pharmaceuticals and health supplements and demand is expected to increase in line with market trends.

Beeswax is prepared by melting old combs in water after which the mixture is strained and pressed through a cloth strainer either by hand or by mechanical pressure. Primary uses include wax foundations, cosmetics, pharmaceuticals and candles.

Propolis is a mixture of wax and resins, is used by bees for filling up cracks and openings within the hive and in the frames. It can be used as an antibiotic and is a source of vitamins.

Pollen has a high value is used in human and veterinary medicines, and in food.

Royal jelly is a honey bee secretion used in the nutrition of the larvæ and has various health benefits.

Sale of honey by-products could create additional profits, however, additional investments may be required in the collection, transportation and market awareness of by-products.

Meeting the challenges

The quality and traceability of the honey and by-products produced are imperative to the profit and scalability of the opportunity.

Quality

Use of traditional beehives and harvesting and storage techniques leads to inconsistent quality and limits the markets at which the honey can be sold. Investment in training, modern beehives and equipment for harvesting and storage would allow the honey to command a premium price compared to the standard bulk honey produced.

Supply

The supply of honey is inconsistent year-on-year. Beekeepers are scattered around the region which makes harvest forecasts and communications difficult. Cooperative societies are however being developed in Tabora to assist with these challenges. In addition, companies and NGOs are supporting beekeepers with training and investment in modern techniques and equipment.

Traceability

Few beekeepers use record keeping to track information on hives such as when the hive was occupied by a colony, which honey came from a particular hive and where that hive was located. Investment in education of beekeepers on the value of record keeping and investment in extension services to assist beekeepers in tracking each hive may be required to ensure traceability.

Transportation

There are few paved roads in the Tabora Region which restricts the transportation of goods especially in the rainy season. The government has a program to upgrade roads throughout the Tabora Region and is working to improve the rail service.

Tobacco

Tobacco is a popular cash crop for farmers in the Tabora Region due to its profitability. Deforestation for farming land and smoke from tobacco curing threaten bee colonies and beekeeping. The establishment of a honey processing plant would increase farmers' confidence in the demand for honey. NGOs and the MVP are actively encouraging the move from tobacco to other cash crops.

Case Studies



Jempem Enterprises Ltd¹

The business

Jempem Enterprises buys honey and beeswax from local beekeepers in the Tabora, Dodoma and Mbeya regions and processes and packages the honey in Arusha for export. The company has been operating in Tanzania since 1999 and has a workforce of 11–50 people. Jempem has sold 15 tons of processed honey between June 2008 and May 2009.

The challenges

The harvesting, transportation and storage of the bulk honey by beekeepers can be crucial to the quality of the end-product. Due to the number of beekeepers involved, it can be very difficult to trace honey produce to beekeepers and maintain communications. Traceability and quality controls are important factors for the export and organic markets. The plant at Arusha is running below capacity due to the shortage of bulk honey.

Meeting the challenges

Jempem is actively involved in educating and training local beekeepers on the importance of quality and how to best ensure quality is maintained through the harvesting and storage process. Jempem also encourages beekeepers to join cooperative societies to work together and share knowledge.

Tabora Pure Honey²

The business

Mr Mukesh Ramji Patel is based in the city of Tabora. His company produces approximately 80 tons of honey per annum and he sells bottled honey locally and produces barrels that are sent to a processor in Dar es Salaam who then exports to Iran.

The challenges

Tabora Pure Honey is processed to the first stage locally, utilizing a manual system that relies on straining the raw honey through mesh to remove the normal debris that accumulates in raw honey. This is a labor intensive, low technical approach that nonetheless produces a high amount of good honey. The demand for Tabora Pure Honey is such that Mr Patel believes there is a potential to increase production significantly.

Meeting the challenges

A shift from manual to mechanized processing would be necessary to fulfil greater output and to process to a higher level than is currently being achieved locally.

1 KPMG interview program
2 Millennium Cities Initiative

Case Study

Cooperative societies in honey production

Cooperative societies have proved to be a successful way of improving supply. At its peak, the Tabora Beekeepers Cooperative Society had over 6,500¹ members and provided essential services such as buying, processing and selling. Its collapse due to financial mismanagement led to the number of beekeepers being reduced to 2,600 (estimated)¹ with few support services and little access to market.

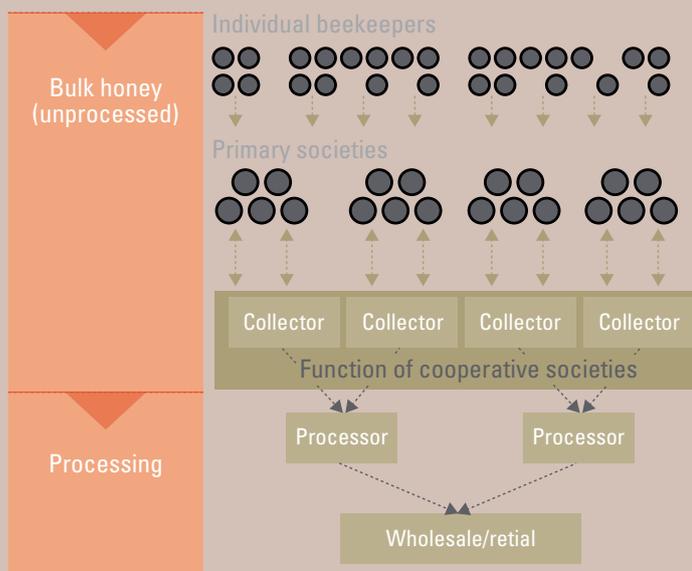
A new cooperative society was established in 2008 in Tabora and has provided support to the beekeepers in the region by creating a collection center and by providing training on modern techniques. The union consists of 261¹ cooperative societies, and each cooperative society consists of approximately 100¹ beekeepers. Approximately 70 percent¹ of beekeepers in Tabora belong to the cooperative society.

The cooperative societies assist in strengthening the supply chain by purchasing honey from primary societies and selling it to processors. Approximately US\$11–15¹ is required to join a primary society and approximately US\$1500¹ is required to create a cooperative society. The capital is collected from the participating beekeepers.

Cooperative societies have proved successful in other cities as highlighted in case studies in the 2010 KPMG/MCI report on Mekelle, Ethiopia.

There was formerly a processing center operated by the cooperative society 'Kipalapala'. However, the operation shut down in 1998 because of lack of capital.

Function of cooperative societies in honey supply chain



¹ KPMG interview program
 Note: 1US\$ is equal to 1,340TSH
 Source: Website of Tradecraft, Study commissioned by Tradecraft and SME competitiveness facility and conducted by Match Maker Associates Limited
Honey and Beeswax Value Chain Analysis in Tanzania, KPMG interview program

Edible Oil Opportunity

World population growth, especially in emerging markets, is creating opportunities in the edible oils market. Production of edible oil has consistently increased across the world with traditionally high exports of soya oil from South America and palm oil from South East Asia. China and India are the two leading importers today; however, across the world demand for edible oils is exceeding supply and new market prospects are developing

Edible oil market

The global oils and fats market grew at a compound annual growth rate (CAGR) of 5.0 percent and is projected to grow at a faster pace up to a value of US\$92.3 billion in 2014. According to *Oil World*, global demand for eight vegetable oils including palm oil and soybean oil is expected to exceed production for the first time in eight years in 2010–11.

World population growth and urbanization

The world population is expected to increase by 2.5 billion to reach 9.1 billion by 2050. The majority of the growth is expected to take place in the less developed countries and concentrated among the poorest populations in urban areas.

In 2008, for the first time in history, more than half of the world's population lived in towns and cities; by 2030 this number is expected to swell to almost five billion. Global population growth, increased urbanization and a rise in per capita income are fundamental drivers in the increase of edible oil market demand.

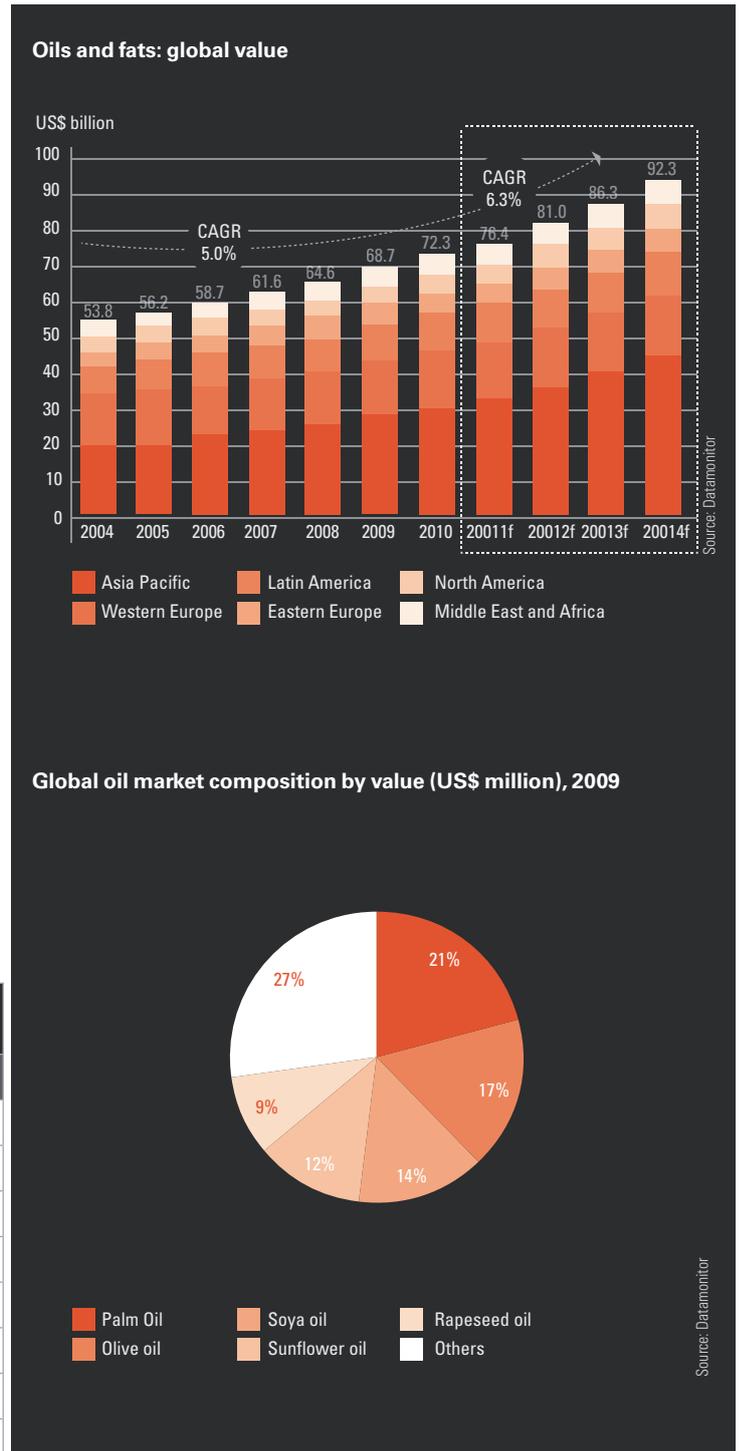
Supply trends

Global oils/fats demand in 2010–11 is anticipated to exceed production and, in turn, lead to a drop in global inventories; the production shortfall is estimated to amount to 3.3 million tons or two percent.¹

Supply constraints are expected in wheat, rice, corn, canola, sunflower seed and above all in soybeans. Weather conditions in South America are critical for corn, wheat, sunflower seed and soybeans.

| World production of major oil seeds FAO Food Outlook, November 2010 ¹ | | | | |
|---|------------|------------|------------|------------|
| Million tons | 2007–08 | 2008–09 | 2009–10e | 2010–11f |
| Soy beans | 220 | 212 | 260 | 258 |
| Cotton seed | 44 | 42 | 40 | 44 |
| Rapeseed | 49 | 58 | 61 | 56 |
| Ground nuts | 35 | 35 | 33 | 34 |
| Sunflower seed | 29 | 35 | 32 | 32 |
| Palm kernels | 11 | 12 | 12 | 13 |
| Copra | 5 | 5 | 6 | 5 |
| Total | 393 | 399 | 444 | 442 |

¹ Press search, FAO





The FAO recommends an annual vegetable oil consumption of 5kg per capita. Based on this the demand for vegetable oil in the Tabora Region would be over 9,000 tons

Edible oil: Tanzanian market

Over the next ten years, the population of Tanzania is expected to grow by 2.8 percent.

Domestic demand opportunities

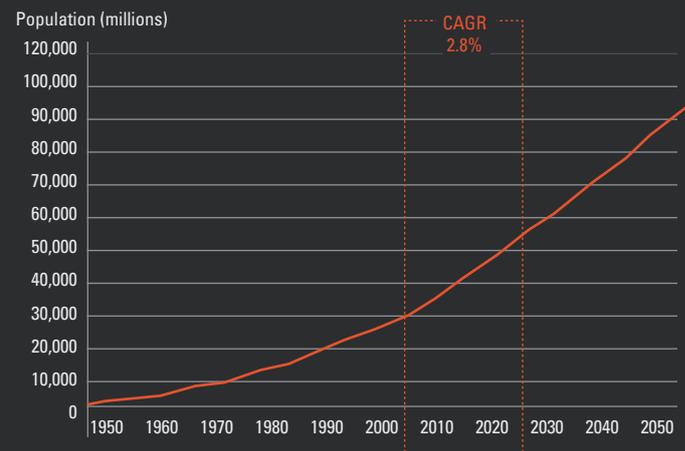
Oil seed production in Tanzania mainly focuses on ground nuts (40%), sunflower (36%), sesame (15%), cotton (8%) and palm oil (1%).

More than half of vegetable oil consumed in Tanzania is imported due to the lack of supply in local production.

The FAO recommends an annual vegetable oil consumption of five kg per capita. Based on this the demand for vegetable oil in the Tabora Region would be over 9,000 tons. Agencies such as the United Nations World Food Program and NGOs support the delivery of this recommendation; however, not everyone in the region will have access to five kg.

With a production operation based in Tabora, there would be potential opportunities to market to neighboring regions with growing populations such as Shingida, Mbeya, Rukwa, Kigoma, and Shinyanga. There would also be a cost advantage against imported oil in these regions.

Tanzanian population forecast



Potential demand for edible oil in neighboring regions around Tabora based on FAO recommendations

| Region | Tabora | Shingida | Mbeya | Rukwa | Kigoma | Shinyanga |
|---|-----------|-----------|-----------|-----------|-----------|-----------|
| Population in 2009 | 1,817,910 | 1,401,592 | 2,758,005 | 1,433,555 | 1,549,626 | 3,253,156 |
| Potential demand for vegetable oil (tons) | 9,090 | 7,008 | 13,790 | 7,168 | 7,748 | 16,266 |

Note: Potential demand for edible oil is based on the FAO's recommendation of 5 kg annual per capita consumption of vegetable oil

Source: Sokoine University of Agriculture *Agribusiness Innovation in Six African Countries – The Tanzanian Experience* – National website of the United Republic of Tanzania
KPMG interview program

Opportunity in sunflower oil production

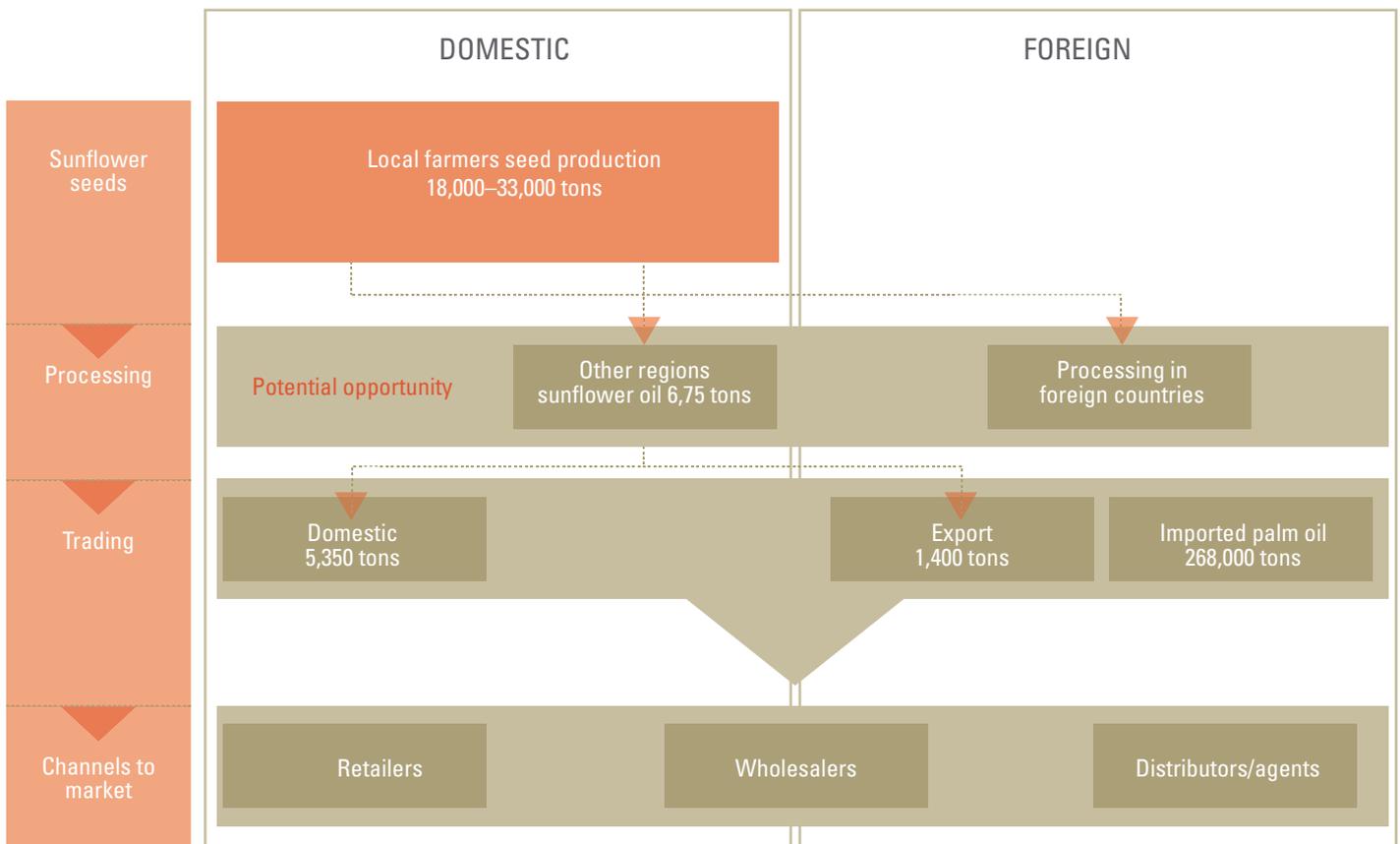
Lack of local supply has resulted in Tanzania importing edible oils, however, the production of sunflower oil could be a competitive alternative.

The Tabora Region has arable land that could be used to farm sunflowers for the seeds.

Sunflowers have low soil nutrient requirements, making the crop a viable option for less fertile areas of the Tabora Region and, compared to the popular tobacco cash crop, the production cycle of sunflowers is less labor intensive which could be an incentive to farmers.

Producing sunflower oil in the Tabora Region has a transportation cost advantage if the seeds can be sourced locally.

Example sunflower supply chain in Tanzania



Notes: Export volume is estimated based on a major oil processor's production for export who indicated that they export sunflower oil for higher prices as local prices are competitive with cheap imported oil

Source: KPMG in Tanzania interview program
FAO
RURAL LIVELIHOOD DEVELOPMENT COMPANY "Sunflower Sector – Market Development Strategy"

Basic assumptions of economic impact

Based on the assumption that all potential demand of edible oil in the Tabora Region is supplied by local sunflower oil, the production volume could be over 9,000 tons. The economic impact of each process is analyzed as follows:

- **Sunflower seeds:** Economic impact shows the potential market value of sunflower seed production
- **Processing:** Economic impact shows the value added of processing seeds for wholesale oil versus the market value of unprocessed sunflower seeds
- **Tabora market:** Economic impact shows the value added of processing seeds for retail versus the market value of processing seeds for wholesale

Example model of the sunflower oil value chain (production volume is based on the potential demand of vegetable oil in the Tabora Region)

| | Sunflower seeds | Oil processing | Tabora retail market |
|---------------------------------------|----------------------------|-------------------------------|----------------------------|
| PRICE | US\$320 per kg | US\$1,800 per ton (wholesale) | US\$2,200 per ton (retail) |
| POTENTIAL PRODUCTION VOLUME IN TABORA | 24,000 tons (hybrid seeds) | 9,000 tons (oil) | 9,000 tons (oil) |
| MARKET SIZE | US\$8 million | US\$16 million | US\$20 million |
| POTENTIAL ECONOMIC IMPACT | US\$8 million | US\$8 million | US\$4 million |

This model suggests the following:

Current market value for the sunflower seeds = US\$8 million

Potential market value for processing wholesale oil = US\$16 million and the economic benefit of moving from sunflower seed production to wholesale sunflower oil will be US\$8 million (minus costs)

Potential market value for the Tabora retail processed oil market = US\$20 million and the economic benefit of moving from wholesale sunflower oil to retail processed oil in Tabora will be US\$4 million (minus costs)

Opportunity in edible oil by-products

Sunflower cake or meal is the technical production waste of extracting the oil by crushing the seeds.

It is high in protein and low in fat and used as a feed for cattle, poultry and fish. Out of a 65 kg bag of sunflower seeds, about 70 percent would be technical waste that can be used for cake or meal.



Case Study

The Mbola Millennium Village in Tabora

The Millennium Village Project is located in Mbola, in the Uyui District of the Tabora Region and began in 2006.

Farming is the mainstay of people living in Mbola. The village land holdings range between one and 15 hectares per household. Before the MVP began in Mbola, most farmers grew tobacco — a labor intensive cash crop requiring expensive inputs (seeds and large amounts of fertilizer).

Since its arrival in Mbola, the MVP has encouraged farmers to diversify their farms to include other high-value crops such as sunflowers, fruits and vegetables. Nearly 5,900 of the 6,000 farmers in the area followed suit thereby generating a boost in their incomes.

The Mbola Millennium Village project in Tabora shows the potential of sunflower production. The activities of the project include:

- The use of high quality seeds (hybrid seeds) and suitable fertilizer
- The education of farmers of the advantages of sunflower over tobacco
- The build up collection points for efficient transportation
- Finding and negotiating with customers

Sunflower production in Mbola

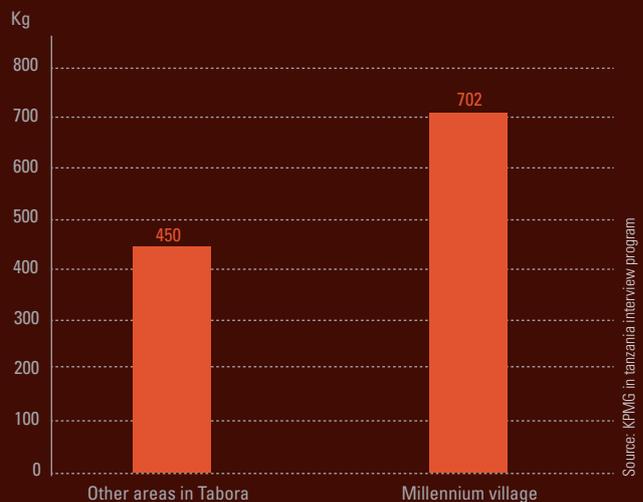
During 2008 to 2009, the MVP introduced a focused program to encourage farmers to grow sunflowers since the region's climate and soils are well suited to their growth. The MVP provided high-yielding variety (HYV) hybrid seeds as well as fertilizers to the farmers as loans.

The hybrid seeds have an oil content of about 40 to 50 percent, while the local seeds have an oil content between 20 to 35 percent. The hybrid seeds as a raw input are more expensive; therefore, the farmers relied on the inputs provided by MVP.

The MVP program resulted in a 53 percent increase in yield per acre by using HYV seeds over the local varieties.

Tobacco continues to remain a strong competitor for sunflowers in the region. Due to its labor intensive growing process, however, the MVP has been trying to educate farmers on the advantages of growing other crops.

Sunflower seeds: harvest volume per acre



Case Study



Mount Meru Group

The business

The Mount Meru Group is one of the largest business groups in Northern Tanzania. Established in 1978, the family-owned group has grown to become a local force in petroleum products, logistics, animal feed and edible oil. Mount Meru Millers, a subsidiary company, is a leading manufacturer in sunflower edible oil with three production facilities. Recently the manufacturing plant at Arusha was significantly modernized and the product has been accepted by the European market. Three grades of sunflower oils are produced at the Arusha refining facility, along with processed cake for animal feed.

The challenges

To maintain an efficient production cycle, a stable supply of sunflower seeds needs to be established. With regards to labor, there is a short supply of local educated individuals for supervisory and managerial positions. Competition from cheap imported palm oil threatens profitability of sunflower oil production.

Meeting the challenges

Through the subsidiary Mount Meru Seeds, the group is seeking to help transform subsistence agriculture into commercial farming and works with national and regional agricultural research institutes. In terms of labor, the group looks outside the local labor pool for supervisory and management positions. To increase profitability, the group is extending its reach beyond the domestic market into Europe and other continents. Products are also offered in different sizes to cater to various income levels.



Long Term Investment Opportunities

Tourism

The Government of Tanzania views tourism as a significant industry and created the Tanzanian Tourist Board in 1992 to support its development and encourage foreign investment. Tourist attractions include Mount Kilimanjaro, the Serengeti National Park, the Ngorongoro Reserve and coastal tourism on the islands of Zanzibar, Pemba and Mafia

Tourism in the Tabora Region is largely untapped with only one hotel for international travelers. The region, however, has a number of attractions appealing to a wide range of tourists.

Opportunities and challenges of tourism

Historical attractions

The famous travels of Dr David Livingstone took him through the Tabora Region and this route is now gaining popularity from backpacker-type tourists. The slave trade routes are also inducing tourists to trek through the region.

Challenges include the scarcity of tourism promotion and marketing for the Tabora Region, and poor infrastructure.

Game reserves

Ugalla Game Reserve is located between the Tabora and Rukwa regions and during the dry season is a haven for a wealth of wildlife including elephants, hippopotamuses and lions, however, in the rainy season, it is difficult to access.

If the game reserve can improve access and meet the criteria of a National Park it will attract greater demand and receive more publicity and benefit from the prestigious branding.

Hotels

The one hotel that accommodates international travelers in Tabora has a high occupancy rate. Poor infrastructure and a scarce supply of skilled employees remain challenging.





Case Study

Orion Tabora Hotel

The opportunity

The old railway hotel has been nicely restored and is very good value. The rooms are spacious with TV and mosquito nets and all looking out onto the surrounding gardens. The hotel was originally built by a German baron as a hunting lodge and has lots of atmosphere. The hotel restaurant has a very good reputation with a well stocked bar and is frequented by the high income locals and offers popular live music every weekend.

The challenges

Labor skilled in tourism is very limited in the area and employees need to be brought in or trained. Unstable water and power supplies restrict some of the quality of service and facilities offered.

Meeting the challenges

Infrastructure improvements will encourage more tourists to stay at the hotel. A good supply of labor skilled in tourism will draw in good reviews and more customers.

Biofuels

The search for alternatives to fossil fuels is widening in response to volatile oil prices and growing environmental concerns. Countries will be investing more and more in the application of biofuels as an alternative energy source. The success of biofuel production will depend on three important factors: availability of land in the right climate, technological development and government policies

The biodiesel market is relatively new to Africa, however, the terrain and climate is highly suitable to its production. *Jatropha Curcus* is a type of non-edible shrub that is drought resistant and grows well in marginal/poor soil. The plant is already grown in small quantities successfully in the Tabora Region and used by farmers as fencing around their fields.

Opportunities and challenges of *Jatropha* biodiesel production

Jatropha could be established as an alternative cash crop in the Tabora Region and can be grown next to food and other crops. It is very suitable for Tabora's climate and terrain.

Farmers would need to be educated on the potential market value of growing *Jatropha* rather than other cash crops. The gestation period for a mature plant is five years.

Market

Jatropha could be a locally produced alternative to imported fuel and exported to other regions and countries. Both the United States and Brazil have successfully integrated ethanol into the production of gasoline.

As the availability of fossil fuels decreases, the market for alternative and sustainable cost effective fuel sources will increase.

Investment and research is required in seed quality, fertilizers, farming and processing techniques to improve the yield, quality and profit. This investment would need to produce a yield, quality and profit sufficient to be a viable alternative to current cash crops for farmers and would need to be competitive in cost against imported fuel. Investment would also be required to improve infrastructure to lower transportation costs.

Government policy

The central government founded the National Biofuels Task Force (NSBF) in 2006 and produced an initial draft of biofuel guidelines in 2008.

Private enterprises, NGO, and others are working to persuade the government to formulate and implement a favorable policy to encourage biofuel development.

However, other than the current no tax policy, there are no government initiatives in Tanzania to support the development of a biofuel industry.

Public debate

There is a strong demand by society for governments and private companies to reduce their reliance on fossil fuels and seek alternative and sustainable energy sources. Some governments are establishing mandates and incentives around the investment and development of alternative energy sources.

There is much controversy, however, over the efficiency and the 'real' cost of the developing biofuels. Secondly, there is also a strong public debate around developing countries using arable land for energy rather than food crops.



Case Study



There is a strong demand by society for governments and private companies to reduce their reliance on fossil fuels and seek alternative and sustainable energy sources

Diligent Tanzania Ltd

The business

Diligent Tanzania Ltd is a subsidiary of Diligent Energy Systems, The Netherlands and is based in Arusha. The company purchases Jatropha seeds from roughly 5,000 contracted farmers to produce straight vegetable oil, biodiesel, and by-products and export to Europe. Diligent also provides research and consulting services. The company provides a guaranteed market for the seeds and educates the farmers while encouraging them to grow the Jatropha plants in between food crops.

The challenges

Although the long term investment opportunity for Jatropha oil is strong, investors need to be aware of the short term requirements for farmers. Poor infrastructure will contribute to high transportation costs which will reduce initial profit.

Meeting the challenges

The company provides a guaranteed market for the seeds and educates the farmers while encouraging them to grow the Jatropha plants in between essential food crops.

Infrastructure is expected to improve in the next three years which will be further encouraged by additional investors in the area.

Dairy Production

The FAO recommends the consumption of 200 liters of milk per person per year. In a 2008 report, the Ministry of Livestock Development for Tanzania indicated that although consumption in Tanzania has increased, the average consumption is only 39 liters per person per year. As part of the MKUKUTA targets, the government is focused on developing the livestock industry to help poverty reduction and food scarcity and move this industry from subsistence farming to more commercial enterprises. Demand is already higher than supply across Tanzania and many of the privatized processing plants are not producing at full capacity. To help improve health the government is increasing marketing for milk consumption and a number of agencies and NGOs sponsor school milk programs

There is only one operating dairy plant in Tabora run by the Tanzania Christian Farm Development Trust with a capacity of 5,000 liters of milk per day. In the Tabora Region, due to the lack of fresh pasteurized milk, there is a high demand for long-life and unpackaged unpasteurized milk. In the dry season, many low income households consume watered down milk. As the population increases, so will the demand for milk. A modern commercial production facility could supply both the low and high-end milk market. In addition, other products such as butter and cheese could be produced and sold.

Opportunities and challenges of dairy

Demand

According to a study sponsored by the Dutch government, there is a daily demand of 12,500 liters of milk in the Tabora Municipal District.

Currently, hotels and restaurants catering for tourists and high income families are demanding quality dairy products and school food programs sponsored by agencies and NGOs are increasing the demand for milk.

Challenges include poor infrastructure that restrict access to markets, scattered and moving herds make it difficult to manage the supply chains and disease which contributes to low yields and poor quality milk.

Untreated milk

Many consumers in the rural community prefer to purchase less expensive untreated milk but supply is unstable, especially in dry season.

Pasteurized/long life milk

Pasteurized milk is much healthier than unpasteurized milk, and long-life milk will support the market demand through the year. Investment would be needed to educate farmers, and to provide modern technology to produce long-life milk.



Conclusions

The government of Tanzania has endeavored to pursue positive policies towards foreign investment, infrastructure development, education and economic growth. The establishment of the Tanzania Investment Center (TIC) and the government's active involvement in national and regional economic development programs and policies can be a clear sign to investors that Tanzania currently is, and will continue to be, an investment-friendly environment.

While Tanzania has experienced strong growth and benefitted greatly from foreign investment, the Tabora Region has yet to experience its share of these opportunities. The abundance of natural resources, land and cost effective labor are major advantages to setting up business in the Tabora Region and many opportunities exist for early investors in Tabora. The local government in Tabora is committed to supporting investment and is currently working on policies to ensure a positive local investment climate.

The greatest challenge for investors in the Tabora Region is infrastructure. The railway and road networks can be assets to potential investors if the government focuses efforts on improving the infrastructure. Investment both from the government and the private sector is needed to improve the infrastructure and reduce the challenge and cost of transportation.

The honey and edible oil opportunities identified in this report present opportunities to leverage global market demand for the needs of both today and tomorrow. Investment aimed at meeting the needs of a growing global population and demand for healthy food alternatives make these opportunities attractive to supply long term market demand.

The other investment opportunities highlighted in this report also present unique opportunities. Future demand for biofuels, international tourism and dairy products can be leveraged by investing in these markets.

While none of these opportunities come without barriers and challenges, the national government of Tanzania and the local government in Tabora are committed to supporting investment. The abundance of resources in the Tabora Region and the lack of investment competition here can provide an advantage to the early investors in Tabora.







Appendices

Appendix 1: KPMG Interview Program Participants

KPMG would like to thank the MCI for the opportunity to prepare this report. We would also like to thank the following organizations in the preparation of this report:

Private organizations

- A to Z Textile Mills Ltd.
- Africa Biofuel and Emission Reduction (Tanzania) Ltd.
- Afrihoney
- Barclays Bank Tanzania Ltd.
- Diligent Tanzania Ltd.
- JATA Tours
- Jempen Enterprises Ltd.
- Konoike Construction Co., Ltd.
- Ministry of Agriculture Food Security and Cooperatives
- Mount Meru Group Ltd.
- New Tabora Textiles (Tanzania) Ltd.
- Robin Hurt Safaris (Tanzania) Ltd.
- State Mining Cooperation
- Sumitomo Chemical Co., Ltd.
- Tabora Msitu Products Co. Ltd.
- Thabit Oil Mills

Government and quasi-government organizations

- Beekeepers Union
- Japan International Cooperation Agency Tanzania Office
- Millennium Village
- Ministry of Energy and Minerals
- Ministry of Industry, Trade, and Marketing
- Ministry of Infrastructure Development
- Ministry of Natural Resources and Tourism
- Tabora Bee Project
- Tabora Beekeepers Cooperative Society
- Tabora Region
- Tanzania Bureau of Standard
- Tanzania Electric Supply Company Ltd.
- Tanzania Investment Center
- Tanzania National Roads Agency (TANROAD)
- Tanzania Traditional Energy Development and Environment Organization
- The Tabora Municipal Council
- The United Republic of Tanzania President's Office

Appendix 2: Secondary Research

The following secondary sources have been used in the preparation of this report:

- Agribusiness Innovation in Six African Countries – the Tanzania Experience*. World Bank Institute
- Biofuel Industry Study, Tanzania, An Assessment of the Current Situation*, Worldwide Fund for Nature Tanzania Programme Office, November 2009
- Biofuel Potential and FAO's Estimates of Available Land: The Case of Tanzania*, Hans Morten Haugen, January 2010
- Biofuels, Land Access, and Rural Livelihoods in Tanzania*, International Institute for Environment and Development, Tanzania Natural Resource Forum
- Briefing Business Models for Sustainable Development*, International Institute for Environment and Development, November 2009
- Business Leader Perceptions of the Investment Climate in Tanzania 2008*, Best AC
- Business Leader Perceptions of the Investment Climate in Tanzania 2009*, Best AC
- Business Survey Tanzania Mainland Report*, National Bureau of Statistics, Ministry of Finance and Economic Affairs, July 2008
- CDM Project Formulation Study for Jatropha Biodiesel Development in Tanzania*, Constriction Project Consultants, Inc., March 2007
- Deutsche Bank Report*
- Doing Business in Tanzania: A Country Commercial Guide for U.S. Companies*, United States Department of State, 2009
- Food and Agriculture Organization (FAO) of the United Nations
- Jatropha Curcas L. in Africa*, Global Facilitation Unit for Underutilized Species
- Jatropha Handbook First Draft*, www.fact-fuels.org, March 2006
- Jatropha Production in Semi-Arid Areas of Tanzania: A Feasibility Study*, Rural Livelihood Development Company, June 2007
- Local Biofuel Production for Use in Telecommunications Applications in South Eastern Tanzania Feasibility Study Final Report*, Diligent Energy Services, Ameco Environmental Services, October 2006
- National Accounts of Tanzania Mainland 1998 – 2007*, National Bureau of Statistics, National Accounts Department, Ministry of Finance and Economic Affairs, May 2008
- National Processes, Reforms, and Programmers Implementing MKUKUTA*, Ministry of Finance and Economic Affairs, November 2008
- National website of the Republic of Tanzania
- OECD-FAO Agricultural Outlook 2008 – 2017, Organization for Economic Co-operation and Development*, Food and Agriculture Organization of the United Nations
- Rural Livelihood Development Company – Sunflower Sector – Market Development Strategy
- Sokoine University of Agriculture *Agribusiness Innovation in six African Countries – The Tanzanian Experience*
- Stefan Bogdanov Bee Product Science*, September 2009
- Study commissioned by Traidcraft and SME competitiveness facility and conducted by Match Maker Associates Ltd. *Honey and Beeswax Value Chain Analysis in Tanzania*
- Sustainable Production of Second-Generation Biofuels, Potential and Perspectives in Major Economies and Developing Countries*, International Energy Agency, February 2010
- Tabora Municipal Council Medium Term Expenditure Framework (MTEF) 2009/2010 – 2010/2011*, The United Republic of Tanzania Prime Minister's Office, April 2009

Tabora Region Socio-Economic Profile, Minister of State Planning and Parastatal Sector reform, May 1998

Tanzania Census 2002 Analytical Report Volume X, National Bureau of Statistics, Ministry of Planning, Economy, and Employment, August 2006

Tanzania Government Perspective on Biofuels, Ministry of Agriculture and Food Security and Cooperatives

Tanzania Investment Centre website

Tanzania Investors Guide 2002 and Beyond, Tanzania Investment Center, March 2002

Tanzania Strategy for Growth and Reduction of Poverty, Vice President's Office, June 2005

Tanzania, The Story of an African Transition, International Monetary Fund

The Business Environment Key Issue Discussion GBS Annual Review, November 2009

The Economic Survey 2007, The Ministry of Finance and Economic Affairs, June 2008

The Local Jatropha-based Biofuel Value-Chain Analysis in Tanzania and Zambia, Martin A. Lyewe, May 2008

The Transport Information Service (TIS) from the German Insurance Association (GDV e.V.)

United Republic of Tanzania Fourth Review under Policy Support Instrument, International Monetary Fund, November 2008

Website of Ministry of Natural Resources and Tourism

