Emerging Clusters in the East African Community and Mozambique

by

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BI Norwegian Business School
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**Foreword**

This report undertakes an analysis of emerging clusters in the East African Community (EAC) and Mozambique. The principal aim is to identify the key emerging clusters in this region and analyze their business environment and main activities. The focus lies on key trends, drivers and future predictions with the aim of presenting what opportunities exist for Norwegian companies and investors.

We look into trends and drivers that we believe are the most relevant for industries in Norway today. We also analyze the business environment for the six countries and the main drivers for growth for the region.

The report adopts a cluster perspective on business and focus on emerging clusters in the EAC and Mozambique. The study is important because it looks into a growing and up-and-coming region of the world with clusters gradually emerging representing interesting business opportunities. The report also provides an economic overview of each country and comparisons between the countries. Additionally, we present the extent to which Norwegian companies have presence in this region with an emphasis on identifying which industries that have the largest number of Norwegian companies. Finally, this report represents knowledge that can be of great interest to investors, entrepreneurs and other decision-makers for this region.

The project is undertaken by BI Norwegian Business School on behalf of Norfund, with Professor Torger Reve as head of research and Marius Nordkvelde as project leader.

I would like to make a special thank to research assistant Julie Hamre who has made a significant and excellent contribution in the process of writing this report, thank you.
Executive summary

The East African Community (EAC) is one of the fastest-growing economic communities in the world. Between 2001 and 2009 it grew by an average of 5.8% a year, faster than any other economic bloc with the exception of ASEAN (6.1% growth over the past decade). Mozambique also experienced high average growth over the same period, above the EAC average. It must be emphasized, however, that the growth of the EAC countries and Mozambique started from a very low base.

In the EAC and Mozambique region, Kenya is the largest economy in terms of GDP followed by Tanzania, Uganda, Mozambique, Rwanda and Burundi. Kenya is also the country that has enjoyed the largest increase in overall GDP between 2003 and 2011. However, Mozambique, Rwanda and Uganda had higher annual GDP growth per capita than Kenya in the same period, albeit from a lower base. Burundi had the lowest annual GDP growth rate per capita during this period. All of the countries are among the poorest of the world's developing countries in terms of GDP per capita.

The level of foreign direct investment (FDI) in the EAC countries has more than tripled over the past decade, from about $590 million in 2000 to around $1.7 billion in 2010 (the World Bank, 2012). Compared with average FDI for Sub-Saharan Africa (SSA) of about 4.3% of GDP in 2009, FDI flows to the EAC were somewhat lower at 2.5% of GDP in 2009 (World Bank, 2012). Although the level of FDI to the EAC is still relatively low, it has increased considerably over the past decade. Mozambique has also experienced strong FDI growth in recent years, doubling FDI inflows between 2010 and 2011, and now has much higher FDI than the EAC countries. Mozambique has twice the FDI level of Tanzania, which had the highest FDI level in the EAC in 2012.

As FDI has increased in the East Africa region, the number of Norwegian companies in the region has grown significantly between 2000 and 2012, from 52 to 158. East Africa has the largest concentration of Norwegian companies in SSA. The majority of EAC countries had over 25 Norwegian companies in 2012.

Of the 158 Norwegian companies in East Africa, 121 are located in the EAC and Mozambique region. Tanzania had the highest number of Norwegian companies in 2012 with 39, followed by Kenya (36) and Uganda (30) and Mozambique (14). These countries also experienced a significant increase in the number of Norwegian companies present from 2000 to 2012. Burundi had zero Norwegian companies in both 2000 and 2012, while Rwanda had zero in 2000 and 2 in 2012.

Green resources was the industry with by far the largest number of Norwegian companies in 2012 in the EAC and Mozambique region. This industry also experienced the greatest increase in the number of Norwegian companies between 2000 and 2012. There were also a considerable number of Norwegian companies in the region in knowledge-based services, renewable energy, environmental services, oil and gas, maritime and tourism, with a strong increase between 2000 and 2012.
Quality of business environment – a comparison of EAC countries and Mozambique
Most of the six countries are rich in natural resources and all share a strong dominance by the agriculture sector. Additionally, significant discoveries in industries such as coal, oil, gas, aluminium and gold are increasing and boosting interest in countries such as Mozambique and Tanzania. Mozambique and Tanzania had the highest share of exports as a proportion of GDP within the EAC and Mozambique region. These two countries also had the highest percentage of natural resource exports as a share of total exports in the region (albeit below average for SSA). Total exports as a share of GDP are relatively low for all the countries compared to other African and SSA countries. Exports per capita are also relatively low for all the countries compared to other SSA countries.

The African market, including the EAC and Mozambique, has undergone tremendous development in recent years, involving a transition from agricultural to urban economies and giving rise to economic growth through service-related sectors. A decrease in the share of GDP generated from agriculture and natural resources enables growth in manufacturing and service industries, which in turn facilitates jobs and higher income levels, thereby raising domestic demand. Generally, a 15% increase in the manufacturing or service sector as a share of GDP correlates to a two-fold increase in income per capita. Although some of the countries in the EAC and Mozambique region depend strongly on one commodity, such as aluminium for Mozambique, this group is in the process of diversifying its sources of growth by increasing manufacturing and services as a proportion of GDP. Kenya and Uganda are considered to be among the more diversified economies within the group. However, a considerable proportion of the EAC and Mozambique workforce are still employed in agriculture, at between 70% and 93%, which is well above the African average of 65%.

In terms of the World Bank's ranking of the ease of doing business (benchmarked at June, 2012), Rwanda is placed the highest at 52, which is very good compared to the regional average. Uganda is ranked 120, Kenya 121 and Tanzania 134. Burundi ranks the lowest at 159, well below the regional average, indicating that the regulatory environment is not as favourable for the start-up and operation of a local firm (World Bank, 2012). The regional average for SSA is 140. Mozambique and Burundi rank below this.

Kenya is placed the highest of all the 185 countries in relation to the ease of getting credit (12), far better than the SSA average of 109. Burundi ranks the lowest with a score of 167 out of 185 economies.

Clusters in the EAC and Mozambique
Jewelry, precious metals and collectibles is the cluster with the largest value of exported goods in Tanzania. The hospitality and tourism cluster is the second largest and the agriculture cluster is the third largest cluster in terms of total export. Jewelry, precious metals and collectibles and the tobacco are the clusters with the largest market share globally in Tanzania, and they also experienced the highest increase in world market share from 2000 to 2010.

The cluster of agriculture products is the largest cluster in Kenya in terms of export value. The cluster of transportation and logistics is Kenya’s second largest cluster in terms of exports.
The cluster experienced one of the largest average growths in terms of export share globally compared to all the other clusters in Kenya between 2000 and 2010. Except for agriculture the largest clusters in terms of exports are service clusters in Kenya; Transportation and logistics cluster followed by hospitality and tourism and communication services in terms of export value. The transportation and logistics cluster is also the cluster that has experienced the largest average change in export share from 2000 to 2010 among the largest clusters. Kenya has the most sophisticated ICT infrastructure in the region favoring both the financial service industry and communication services. Kenya also has the highest percentage of Internet users and mobile phone subscribers in East Africa.

Metal, mining and manufacturing is by far the largest cluster in Mozambique in terms of exports compared to the other clusters in the country. The cluster has experienced one of the largest average growths in terms of export share compared to all the other clusters in Mozambique from 2000 to 2010. The tobacco cluster and the power and power generation equipment clusters are the clusters with the strongest average increase in share of exports during this period, a change of 0.4% and 0.11% respectively. The power and power generation equipment clusters is the second largest cluster in Mozambique in terms of total export.

The hospitality and tourism cluster in Rwanda is the largest cluster in terms of exports compared to the other clusters in the country. The agriculture products cluster in Rwanda was the second largest cluster in the country in terms of exports in 2009. The metal, mining and manufacturing cluster in Rwanda is among the four largest clusters in the country in terms of exports. The transportation and logistics cluster in Rwanda is also among the four largest clusters in the country in terms of exports.

The hospitality and tourism cluster is the largest cluster in relative terms in Uganda followed by agricultural products. The fishing and fishing products cluster is the third largest cluster in Uganda. The tobacco cluster and the fishing and fishing products cluster are the clusters with the strongest average increase in share of exports during this period in Uganda.

See figure below for an overview of the largest clusters in terms of total export in each country in the EAC and Mozambique and the different clusters world market share and change in world market share between 2000 and 2010.
National Cluster Export Portfolio for the largest clusters (total export) in the EAC and Mozambique 2000 – 2010


The figure is a comprehensive graphic illustration of the largest clusters in terms of total export in each country in the EAC and Mozambique. It focuses on the various clusters’ world export share in 2010 (y-axis - can be interpreted as market shares, world export share for relevant cluster in a country), the average change in the country’s share of export from the clusters in the period of 2000 to 2010 (x-axis) and the size of the clusters in terms of total exports (size of the bubble). The figure also shows the countries overall average of world export share in 2010 and the average change in the countries share of exports from 2000 to 2010 through the dashed lines vertically and horizontally respectively. Being above the line indicates that that the cluster is relatively specialized in the EAC and Mozambique region. Being to the right of the line means that the cluster is gaining share faster than what the EAC and Mozambique region is gaining (or losing) in share of global goods exports overall.
The hospitality and tourism cluster and agriculture cluster are among the three largest clusters in terms of total exports for all the EAC countries except for Mozambique, which has a somewhat different industry structure.

None of the largest clusters in the EAC countries or Mozambique have more than a 0.5% global market share. However, some smaller sub-clusters have a higher market share. There are very few clusters among the EAC countries that are ranked among the top 20 in the world in terms of exported goods globally by the cluster; a few sub-clusters, however, do rank among top 20. With the exception of jewellery, precious metals and collectibles in Tanzania and Tobacco in Tanzania, Kenya, Uganda and Mozambique, none of the largest clusters experienced growth above 0.15% in world export share between 2000 and 2010. However, some of the smaller sub-clusters experienced more significant growth in world export share over this period, such as plants and flowers in Kenya, Tanzania and Uganda, electrical power generation in Mozambique, precious metals in Tanzania and processed seafood in Uganda and Tanzania.

An interesting development has been the EAC region's strong growth in the share of exports to trading partners in SSA between 2000 and 2010. This clearly demonstrates that trade is increasing between regions in Africa. Mozambique is the only country that saw a decrease in its share of exports to SSA, although it increased its share of exports to South Africa in the same period.
Introduction

This report examines emerging clusters in the East African Community (EAC) and Mozambique. The East African Community (EAC) is a regional intergovernmental organization consisting of Burundi, Kenya, Rwanda, Tanzania and Uganda. The establishment of the community entered into force in 2000 with the aim of enhancing and deepening the cooperation between the partner states with an emphasis on political, economic and social areas for mutual benefit (East African Community, 2013). Mozambique is also included in this report.

The first part of the report provides a presentation of the countries through an overview of their financial positions. Then the countries quality of national business environment are analyzed with a focus on factor conditions, demand conditions and the overall competitive situation (Porter 1998) for the different countries.

The next part of the report consists of an assessment of what is considered to be the key clusters and the key emerging clusters in the EAC and Mozambique. The focus will lie on the clusters, export values and export shares globally and the development and most important drivers of growth. Export is not only an important measure of cluster performance, especially for countries with a small home market, but export clusters are also the primary source for of an area’s economic growth and prosperity over the long run. (Porter 1998). The demand for local industries is limited, but export clusters can grow far beyond the limit (Porter 1998).

Finally, the last section looks into trends and drivers for the emerging clusters and drivers of growth for the whole region. We will also provide some concluding remarks as to future predictions of the clusters and the region in general.
1. The economic growth in the East African Community and Mozambique

According to the World Bank (2012) the East African Community (hereby EAC) is one of the world’s fastest growing economic communities. For the last decade between the period 2001 and 2009 the community has enjoyed an average growth of 5.8% per year (see figure 1.1 below). This demonstrates a growth faster than any other economic block in the world, with the exception of ASEAN (6.1% growth during the last decade).

![Figure 1.1: Average GDP growth in the EAC compared to other economic blocks](image)

Source: World Bank (computation based on WDI 2012 data)

Not only the economic community as a whole has experienced strong growth, each country individually in the EAC has also more than doubled its GDP during the last decade (World Bank, 2012). Although the EAC countries all have enjoyed a strong growth it is important to highlight that this growth has started from very low levels (see figure 1.2 below) and has been distributed unevenly among the countries (see figure 1.3 below).
Mozambique had a GDP of $14, 59 billion in 2012, which is also illustrated below in figure 1.3 (World Bank, 2013).

As can be seen from figure 1.3 above, Kenya is the largest economy in terms of GDP followed by Tanzania, Uganda, Mozambique, Rwanda and Burundi. Kenya is also the country who has enjoyed the largest increase in total GDP from 2003 to 2011. However, Mozambique, Rwanda and Uganda had a higher annual GDP growth rate per capita in the same period than Kenya, but they started from a lower base. Burundi had the lowest annual GDP growth rate per capita in the same period.

Figure 1.4 and figure 2 below presents GDP per capita for each country of analysis and selected East African countries and other emerging markets. Kenya has the highest GDP per capita since 2000, while Burundi has the lowest. GDP per capita is a very important indicator to look at for companies, given that it is highly correlated with the ease of doing business in each country.
1.1 GDP growth rate

The table below shows the GDP growth rate for each country from 2003 to 2011. We see that Rwanda is the country with the highest growth rate in 2011, and from 2003 to 2004 this country along with Burundi experienced by far the most significant increase in growth rate compared to the other countries. However, it is important to emphasize again that the growth started from a very low base for all the countries.

<table>
<thead>
<tr>
<th></th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Burundi</td>
<td>-1.2</td>
<td>4.8</td>
<td>0.9</td>
<td>5.4</td>
<td>4.8</td>
<td>5</td>
<td>3.5</td>
<td>3.8</td>
<td>4.2</td>
</tr>
<tr>
<td>Kenya</td>
<td>2.9</td>
<td>5.1</td>
<td>5.9</td>
<td>6.3</td>
<td>7</td>
<td>1.5</td>
<td>2.7</td>
<td>5.8</td>
<td>4.4</td>
</tr>
<tr>
<td>Mozambique</td>
<td>6</td>
<td>8.8</td>
<td>8.7</td>
<td>6.3</td>
<td>7.3</td>
<td>6.8</td>
<td>6.3</td>
<td>7.1</td>
<td>7.3</td>
</tr>
<tr>
<td>Rwanda</td>
<td>1.5</td>
<td>6.9</td>
<td>9</td>
<td>8.6</td>
<td>7.6</td>
<td>11.2</td>
<td>6.2</td>
<td>7.2</td>
<td>8.2</td>
</tr>
<tr>
<td>Tanzania</td>
<td>6.9</td>
<td>7.8</td>
<td>7.4</td>
<td>6.7</td>
<td>7.1</td>
<td>7.4</td>
<td>6</td>
<td>7</td>
<td>6.4</td>
</tr>
<tr>
<td>Uganda</td>
<td>6.5</td>
<td>6.8</td>
<td>6.3</td>
<td>10.8</td>
<td>8.4</td>
<td>8.7</td>
<td>7.3</td>
<td>5.9</td>
<td>6.6</td>
</tr>
</tbody>
</table>

The figure below shows the same numbers as the table above graphically.

*Figure 3: GDP growth rate graphically illustrated for the EAC and Mozambique*

*Source: World Bank (2013)*
1.2 Economic growth across countries

In the figure below we present an overview of the economic growth across countries in Africa from 2001 to 2011 (the EAC countries and Mozambique are highlighted in blue).

Source: World Bank

Source: World
1.3 Establishment of Norwegian companies in the EAC and Mozambique

This section of the report investigates the extent to which Norwegian companies are established in the region of the EAC and Mozambique.

Based on information provided by Innovation Norway, the Norwegian Council for Africa along with data available from the research project “A knowledge-based Norway” (2012), we have put together a list of the Norwegian companies that had business in this region during the period between 2000 and 2012. We found that the number of Norwegian companies in the region of East Africa has grown significantly during this period, from 52 to 158 (see figure below). The figure also illustrates that that the largest number of Norwegian companies is located in the region of East Africa. It should be noted that some errors might have occurred in the list, particularly for the year 2000. This means that there may be some companies that are omitted that should have been included and some companies that are no longer active in Africa that should have been removed. Nonetheless, we believe that the list provides a very good indication both in terms of the development over time and the level of activity for various industries in the different countries. We also point out that the Norwegian Council for Africa is currently working on a more detailed list for the year of 2013.

Figure 5: The geographical spread of Norwegian establishments on a regional level

Source: BI Norwegian Business
1.4 The increase of Norwegian companies from 2000 to 2012

As can be seen from the two comparable figures below there has been a considerable increase in the number of Norwegian companies in the EAC and Mozambique from 2000 to 2012. The majority of the EAC countries have over 25 Norwegian companies established in 2012.

Figure 6: The geographical spread of establishments per country from 2000 to 2010

Source: BI Norwegian Business School
1.5 Distribution of Norwegian companies across industries

The Norwegian companies with presence in East Africa have also been categorized into 14 different industries (see table below). Green resources represent by far the industry with the largest number of companies in 2012, with 31 Norwegian companies. This industry also experienced the greatest increase in the number of companies from 2000 to 2012, an increase of almost 250%. The industries knowledge-based services and renewable energy and environment also have a considerable number of Norwegian companies with a strong increase from 2000 to 2012.

Table 2: Distribution of companies across industries

<table>
<thead>
<tr>
<th>Industry</th>
<th>East Africa*</th>
<th>2000</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Offshore, oil og gas</td>
<td></td>
<td>4</td>
<td>13</td>
</tr>
<tr>
<td>Maritime</td>
<td></td>
<td>1</td>
<td>11</td>
</tr>
<tr>
<td>Seafood</td>
<td></td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Finance</td>
<td></td>
<td>2</td>
<td>9</td>
</tr>
<tr>
<td>IT</td>
<td></td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>Knowledge-based services</td>
<td></td>
<td>13</td>
<td>21</td>
</tr>
<tr>
<td>Renewable energy and environment</td>
<td></td>
<td>5</td>
<td>21</td>
</tr>
<tr>
<td>Health and biotech</td>
<td></td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Trade</td>
<td></td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Building, construction and property</td>
<td></td>
<td>4</td>
<td>12</td>
</tr>
<tr>
<td>Tourism</td>
<td></td>
<td>0</td>
<td>10</td>
</tr>
<tr>
<td>Metals and materials</td>
<td></td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Telecom</td>
<td></td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td>Green resources</td>
<td></td>
<td>9</td>
<td>31</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>52</strong></td>
<td><strong>158</strong></td>
</tr>
</tbody>
</table>

*East-Africa: Burundi, Komorene, Djibouti, Eritrea, Etiopia, Kenya, Madagascar, Malawi, Mauritius, Mosambique, Rwanda, Somalia, Seychellene, South-Sudan, Sudan, Tanzania, Uganda, Zambia, Zimbabwe

Source: BI Norwegian Business School
Source: BI Norwegian Business School
1.6 Presence of Norwegian companies in the EAC and Mozambique

The table below presents the number of Norwegian companies established in each country in 2000 compared to 2012.

Table 3: Detailed overview of Norwegian companies across industries in the EAC and Mozambique from the year 2000 and 2012

<table>
<thead>
<tr>
<th>Industry</th>
<th>Mozambique</th>
<th>Burundi</th>
<th>Kenya</th>
<th>Tanzania</th>
<th>Uganda</th>
<th>Rwanda</th>
</tr>
</thead>
<tbody>
<tr>
<td>Offshore, oil and gas</td>
<td>2</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Maritime</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Seafood</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Finance</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>IT</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Knowledge-based services</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Renewable energy and environment</td>
<td>2</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Health and biotech</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Trade</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Building, construction and property</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Tourism</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Metals and materials</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Telecom</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Green resources</td>
<td>2</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>7</td>
<td>14</td>
<td>0</td>
<td>0</td>
<td>9</td>
<td>36</td>
</tr>
</tbody>
</table>

*Source: BI Norwegian Business School*
1.7 Total overview of Norwegian companies established in each country

The figure below provides a total overview of the number of Norwegian companies established in each country in 2000 compared to 2012. Tanzania had the greatest number of companies in 2012 followed by Kenya and Uganda. These three countries also experienced a significant increase in the number of companies present from 2000 to 2012. Burundi had zero companies in 2000, and this was also the case in 2012, while Rwanda had zero in 2000 and 2 in 2012.

![Figure 8: Total number of Norwegian companies established in each country in 2000 and 2012](image)

Source: BI Norwegian Business School

1.8 The effect of the local business environment

The effects of the local business environments are of great importance for a company when choosing the location for establishment, and this can be illustrated by using a country as an example. Kenya is considered among the most attractive locations for Norwegian companies. In 2012, there were 36 Norwegian companies with business in Kenya. These companies come from various sectors with a strong emphasis on green resources, knowledge-based services and renewable energy. The relatively well-developed business environment in Kenya represents an important reason for the large number of Norwegian companies established there. According to the Global Competitiveness Report 2012-2013, Kenya’s innovative capacity is rated at the impressive level of 50 on a global level, with high R&D costs among companies and good scientific research institutions cooperating well with the private sector. In addition, this innovative potential is supported by an educational system that is rated relatively good in terms of quality (37) as well as training in relation to employment (62). The economy is also supported by the financial market, which is well-developed compared to international standards (24) and a relatively effective labor market (39).
A main point recognized in this context is that it is no longer only natural resources that make an African country an attractive location for Norwegian companies, but also the standard of the local business environment, attractive local markets, strong clusters and business communities in Norway and the interaction between these factors, that jointly create the conditions for Norwegian expansion in the region. The next section of this report will go through the quality of the business environments of the countries by looking into various aspects affecting the business environment and the attractiveness of the location of each country.
2. Quality of the Business Environment – A comparison of the EAC and Mozambique

2.1 Factor conditions

2.1.1 Geographic location

The six countries differ in terms of their geographic location. Burundi, Rwanda and Uganda are landlocked and dependent on other countries for ports and coastline, while Mozambique, Tanzania and Kenya all have a long coastline facing the Indian Ocean. Mozambique for instance is located in a very favorable position geographically with a long coastline representing an important point of access to international markets, particularly for neighboring countries that are landlocked (World Bank, 2013). Rwanda has no direct point of access to ports or harbors, nonetheless, the country can be considered a stable oasis with a central location on the African continent finding itself located close to about 290 million people from neighboring countries (Porter, 2010). Tourists are drawn to this region given its unique nature like the majestic Mount Kilimanjaro in Tanzania, and its national parks, including the world renowned Serengeti and the famous gorillas in Rwanda.

2.1.2 Natural resources

The majority of the six countries are rich on natural resources and they all share a strong dominance from the agriculture sector. Additionally, significant discoveries in the fields of for instance coal, oil, gas, aluminum and gold are increasingly occurring and placing countries such as Mozambique and Tanzania on the world map. See figure 9, 10, 11 and 12 for a comparison of natural resources exports as a share of total exports for the EAC countries, Mozambique and other Sub-Saharan countries and the rest of the world. Numbers for Rwanda and Burundi were not available.
Figure 9: Natural resource exports as a share of total exports, 2010. All nations (versus GDP per capita, PPP adjusted, 2010)

Source: BI Norwegian Business School Design
Figure 11: Natural resource exports as a share of GDP, 2010. All nations (versus GDP per capita, PPP adjusted, 2010)

Source: BI Norwegian Business School Design
Figure 12: Natural resource exports as a share of GDP, 2010. Africa, Sub-Saharan (versus GDP per capita, PPP adjusted, 2010)

Source: BI Norwegian Business School Design
Agriculture

The countries all have a considerable proportion of their workforce employed in the sector of agriculture (see table below). Similar to most of the countries, Rwanda has a very favorable climate for agriculture and other products (Porter, 2010). In Rwanda, agriculture accounts for about 73% of the labor force, but as little as 36% of output (African Economic Outlook, 2013). Mozambique’s sector for agriculture, forestry, fishing and hunting represented 30.9% of the country’s GDP in 2010 (African Economic Outlook, 2012). Nearly 80% of the workforce in Mozambique is employed in agriculture, but this sector is also considered highly unproductive and subsistence-based (World Bank, 2013). The agricultural sector of Tanzania currently employs about 80% of the workforce in the country. This also accounts for around ¾ of the country’s merchandise exports as well as about 50% of the national income (Tanzania Invest, 2013).

Moreover, agriculture has been particularly important for Kenya representing the backbone of its economy over the years. The sector is widely spread across the country with a great variety of agricultural products making the country an important source for a large amount of agriculture exports (Ministry of Foreign Affairs of Denmark, 2013). Additionally, the economy of Burundi is dominated by agriculture that is subsistence-based, and their main export commodity is coffee. Coffee represents in excess of 60% of the country’s revenues from exports (World Bank, 2013).

As can be seen from the table below, Burundi is the country with the highest percentage of its population employed in agriculture. Similar for all the countries is the high proportion of their workforce in agriculture. In Africa overall, 65% of the workforce is employed in the sector of agriculture.

Table 4: Percentage of the workforce employed in the agriculture sector

<table>
<thead>
<tr>
<th>Country</th>
<th>% of population working in agriculture (2013)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mozambique</td>
<td>80%</td>
</tr>
<tr>
<td>Kenya</td>
<td>75%</td>
</tr>
<tr>
<td>Tanzania</td>
<td>80%</td>
</tr>
<tr>
<td>Rwanda</td>
<td>73%</td>
</tr>
<tr>
<td>Burundi</td>
<td>93%</td>
</tr>
<tr>
<td>Uganda</td>
<td>70%</td>
</tr>
<tr>
<td>Africa</td>
<td>65%</td>
</tr>
</tbody>
</table>

Source: CIA World Factbook; World Bank; IFDC; The US Governments Global Hunger and Food Security Initiative
Coal, aluminum, oil, gas and gold
Mozambique is a country rich on natural resources and its productive base is heavily dependent upon these (African Economic Outlook, 2012). The resources are mainly concentrated in a small number of megaprojects, particularly coal, gas and aluminum. These megaprojects have paved the way for large inflows of FDI. Coal represents one of the most significant resources for the country and continues to expand and attract large investments. In 2011, the country experienced its first export of coal overseas, which made the country a first time world exporter of minerals (African Economic Outlook, 2012). Recently, a huge discovery was made in the field of offshore gas reserves (estimated at 150 trillion cubic feet), which is known to represent one of the largest gas reserves in the world. However, the actual exploitation is not likely to occur before 2019 due to requirements of large investments in infrastructure (transportation) and production (African Economic Outlook, 2012). Other important natural resources for Mozambique include titanium, hydropower, tantalum and graphite (CIA Factbook, 2013).

Until recently, there has been limited success for oil and gas in all of the EAC countries and Mozambique, although oil and gas exploration has been going on for decades. However, the pace of exploration has increased dramatically after sizable discoveries have taken place in several East African countries recently (Emerging East Africa Energy, EIA, 2013). Among the countries with emerging oil and gas developments, Mozambique, Tanzania, Uganda, and Madagascar have shown the most progress towards commercial development of newly discovered resources in recent years (Emerging East Africa Energy, EIA, 2013). Uganda and Madagascar will most likely be the next new oil producers on the continent. Mozambique will probably be the first country in East Africa to develop the capability to export liquefied natural gas (LNG), possibly followed by Tanzania (Emerging East Africa Energy, EIA, 2013). However, commercial development is in general very slow in all these countries. The commercialization of these findings will therefore most likely take many years.

The largest reserves of gold in Africa are considered to be located in South Africa, but closely followed by Tanzania. Tanzania has been a principal area of focus in relation to development and exploration of gold in Africa, and a large part of the expenditure of exploration in Africa has been attracted by Tanzania, amounting to about 15% (Tanzania Invest, 2013). The export of gold in Tanzania currently accounts for over 1/3 of their total exports of goods and services (World Bank, 2012).

For a more detailed analyses of the exports portfolio for each country, including natural resource clusters, please see the cluster analysis of this report.

2.1.3 Infrastructure
A similar trend among the EAC countries and Sub-Saharan Africa is the low scores on the logistic performance indicators (see table below). This is mainly due to challenges faced by these countries in terms of inefficient customs procedures, poor infrastructure and logistics competence that altogether reduce the economic development of the countries (East African Community, 2011).
Table 5: Logistics Performance Indicators (LPI) for the countries for 2010

<table>
<thead>
<tr>
<th>Country</th>
<th>LPI</th>
<th>Rank</th>
<th>Customs</th>
<th>Infrastructure</th>
<th>Logistics Competence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uganda</td>
<td>2.82</td>
<td>66</td>
<td>2.84</td>
<td>2.35</td>
<td>2.59</td>
</tr>
<tr>
<td>Tanzania</td>
<td>2.60</td>
<td>95</td>
<td>2.42</td>
<td>2.00</td>
<td>2.38</td>
</tr>
<tr>
<td>Kenya</td>
<td>2.59</td>
<td>99</td>
<td>2.23</td>
<td>2.14</td>
<td>2.28</td>
</tr>
<tr>
<td>Rwanda</td>
<td>2.04</td>
<td>151</td>
<td>1.63</td>
<td>1.63</td>
<td>1.85</td>
</tr>
<tr>
<td>Burundi</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>East Africa (excl. Burundi)</strong></td>
<td>2.51</td>
<td>-</td>
<td>2.28</td>
<td>2.03</td>
<td>2.28</td>
</tr>
<tr>
<td>Europe and Central Asia</td>
<td>2.74</td>
<td>1</td>
<td>2.35</td>
<td>2.41</td>
<td>2.60</td>
</tr>
<tr>
<td>Latin America and Caribbean</td>
<td>2.74</td>
<td>2</td>
<td>2.38</td>
<td>2.46</td>
<td>2.62</td>
</tr>
<tr>
<td>East Asia and Pacific</td>
<td>2.73</td>
<td>3</td>
<td>2.41</td>
<td>2.46</td>
<td>2.58</td>
</tr>
<tr>
<td>Middle East and Pacific</td>
<td>2.60</td>
<td>4</td>
<td>2.33</td>
<td>2.36</td>
<td>2.53</td>
</tr>
<tr>
<td>South Asia</td>
<td>2.49</td>
<td>5</td>
<td>2.22</td>
<td>2.13</td>
<td>2.33</td>
</tr>
<tr>
<td><strong>Sub-Saharan Africa</strong></td>
<td>2.42</td>
<td>6</td>
<td>2.18</td>
<td>2.05</td>
<td>2.28</td>
</tr>
</tbody>
</table>

Source: World Bank (2010); East African Community (2011)

With reference to the Logistic Performance Index of 2010 Uganda ranked the highest (2, 35) of the countries* in terms of the quality of trade and transport-related infrastructure, which is highlighted in the figure below (World Bank, 2010). The scale is set from 1 to 5, where 1 is the lowest and 5 is the highest (indicating very high quality). The number is based on the evaluation of the quality of for instance ports, railroads, roads, information technology and other related areas. Rwanda ranks the lowest of the countries with only 1.63 out of 5.

Figure 13: Quality of trade and transport-related infrastructure for 2010 (Source: World Bank, 2010)

*Numbers for Burundi were not available

Investments in infrastructure projects

There has been a strong growth in relation to investments in infrastructure projects in Africa, and in 2012 more than 800 active projects were identified with a joint value of more than $700 billion (E&Y, 2013). From the table below Kenya, Uganda, Tanzania and Mozambique are all among the top ten when it comes to number of infrastructure projects in Africa (E&Y, 2013). A large proportion of these projects are connected to power (37%) and transport (41%)

Table 6: Top 10 African destination countries for infrastructure projects, up to February 2013

<table>
<thead>
<tr>
<th>Country</th>
<th>No. of projects</th>
<th>Sum of capital invested (US$ million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>South Africa</td>
<td>134</td>
<td>129.934</td>
</tr>
<tr>
<td>Nigeria</td>
<td>106</td>
<td>95.480,5</td>
</tr>
<tr>
<td>Egypt</td>
<td>82</td>
<td>60.164,7</td>
</tr>
<tr>
<td>Uganda</td>
<td>63</td>
<td>17.730,3</td>
</tr>
<tr>
<td>Kenya</td>
<td>60</td>
<td>32.851,5</td>
</tr>
<tr>
<td>Algeria</td>
<td>34</td>
<td>87.154,1</td>
</tr>
<tr>
<td>Mozambique</td>
<td>31</td>
<td>32.085</td>
</tr>
<tr>
<td>Libya</td>
<td>29</td>
<td>20.668,4</td>
</tr>
<tr>
<td>Tanzania</td>
<td>29</td>
<td>16.185,1</td>
</tr>
<tr>
<td>Cameroon</td>
<td>25</td>
<td>8.470,8</td>
</tr>
</tbody>
</table>

Source: Africa Project Access, Business Monitor International; Ernst & Young analysis

2.1.4 Education and lack of skilled workers

A serious challenge for all the countries is the lack of skilled workers mainly due to poorly developed educational systems. To provide an example, according to the African Economic Outlook (2012) about 80% of the Mozambique’s workforce has not completed upper primary school, and as a little as 13% has completed secondary school. The adult population of Mozambique is projected to have the lowest level of education on a worldwide basis (only 1, 2 years of formal education, see table below). Additionally, Mozambique, Burundi and Rwanda rank below what is considered to be the rank of low human development (4, 2 years), while Kenya is the only country ranked above the medium human development (6, 3 years). None of the countries rank above the high human development (8, 8 years).
Table 7: Mean years of schooling for adults (over 25) for 2012

<table>
<thead>
<tr>
<th>Country</th>
<th>Mean years of schooling (adults 2012)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mozambique</td>
<td>1,2</td>
</tr>
<tr>
<td>Burundi</td>
<td>2,7</td>
</tr>
<tr>
<td>Rwanda</td>
<td>3,3</td>
</tr>
<tr>
<td><strong>Low human development</strong></td>
<td><strong>4,2</strong></td>
</tr>
<tr>
<td>Uganda</td>
<td>4,7</td>
</tr>
<tr>
<td>Tanzania</td>
<td>5,1</td>
</tr>
<tr>
<td><strong>Medium human development</strong></td>
<td><strong>6,3</strong></td>
</tr>
<tr>
<td>Kenya</td>
<td>7</td>
</tr>
<tr>
<td><strong>High human development</strong></td>
<td><strong>8,8</strong></td>
</tr>
</tbody>
</table>

*"Average number of years of education received by people ages 25 and older, converted from education attainment levels using official durations of each level”.

Source: International Human Development Indicators (2012)

2.1.5 Ranking of education and institutions

From the table below we see that Rwanda ranks the highest in terms of health and primary education as well as institutions. The scale is set from 1 to 144 (144 represents the total number of countries included in the ranking) and rank 1 is the best rank, while 144 is the poorest. When it comes to higher education and training Kenya is the country with the most favorable ranking followed by Rwanda. Burundi ranks 143 in higher education and training and 142 in institutions, which are considered very low rankings as there are 144 countries in total.

Table 8: Ranking of education and institutions

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Rwanda</td>
<td>100</td>
<td>117</td>
<td>20</td>
</tr>
<tr>
<td>Uganda</td>
<td>123</td>
<td>127</td>
<td>102</td>
</tr>
<tr>
<td>Tanzania</td>
<td>113</td>
<td>132</td>
<td>86</td>
</tr>
<tr>
<td>Kenya</td>
<td>115</td>
<td>100</td>
<td>106</td>
</tr>
<tr>
<td>Burundi</td>
<td>127</td>
<td>143</td>
<td>142</td>
</tr>
<tr>
<td>Mozambique</td>
<td>137</td>
<td>138</td>
<td>112</td>
</tr>
</tbody>
</table>

Source: GCI (2013)
The countries are continuously working to improve the educational levels of their populations, but the majority has a long way to go. Rwanda has for instance implemented a free nine-year education program, which has improved the enrolment for higher primary and secondary school. In 2005/06 the enrollment rate for primary school was 86.6%, and this number has increased to 91.7% in 2010/11 (African Economic Outlook, 2013).

During the past two years significant improvements have also taken place in the education sector of Burundi. According to the East African Economic Outlook (2013), the primary school enrolment in 2012 was prolonged for 3 years, from 6 to 9 years. Other improvements include an increase in the net primary school enrolment to about 100% in 2010/11 (which was a rise from around 80% in 2003/04). Additionally, gross secondary enrolment increased from 16% in 2003/04 to 26, 7% in 2010/11. The Government has also taken important measures to improve the education system and implemented a law in 2012 introducing a system of first degrees, master degrees and doctorates along with the establishment of a national council for higher education (CNES). Although serious initiatives are implemented by the Government considerable challenges still remain, particularly in relation to unequal access and quality of education with a strong emphasis on secondary and higher education (East African Economic Outlook, 2013).

2.1.6 Labor force

The table below provides an overview of the total population of each country along with the total labor force for 2011 to highlight what proportion of the total population is employed.

<table>
<thead>
<tr>
<th>Country</th>
<th>Total population (2011)</th>
<th>Total labor force (2011)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mozambique</td>
<td>24.581.367</td>
<td>11.359.025</td>
</tr>
<tr>
<td>Rwanda</td>
<td>11.144.315</td>
<td>5.338.277</td>
</tr>
<tr>
<td>Uganda</td>
<td>35.148.064</td>
<td>14.007.698</td>
</tr>
<tr>
<td>Tanzania</td>
<td>46.354.607</td>
<td>22.801.577</td>
</tr>
<tr>
<td>Kenya</td>
<td>42.027.891</td>
<td>16.099.382</td>
</tr>
</tbody>
</table>

Source: World Bank (2011)

A challenge for some of these countries is the large proportion of youths in their population and the unemployment rates among this part of the population. Mozambique for example has about 300.000 youths entering the workforce each year. As a response to the challenge of urban unemployment Mozambique has established the “Strategic Plan for the Reduction of Urban Poverty” (PERPU). This initiative aims to include young and unemployed people into the workforce with a focus on urban areas by providing them with the necessary and sufficient skills (African Economic Outlook, 2012).
2.1.7 Access to finance

According to the ease of doing business index of 2013, Burundi, Mozambique and Rwanda consider access to financing the most problematic factor in relation to doing business (when asked to list the five most problematic factors). The figure below presents the percentage that considers access to financing the most problematic factor when doing business. To provide an example, 20.2% of the respondents in Rwanda ranked access to financing as the most problematic factor when doing business.

**Figure 14: Percentage that ranked access to finance as the most problematic factor when doing business**

<table>
<thead>
<tr>
<th>Country</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kenya</td>
<td>9</td>
</tr>
<tr>
<td>Tanzania</td>
<td>15.6</td>
</tr>
<tr>
<td>Uganda</td>
<td>16.7</td>
</tr>
<tr>
<td>Mozambique</td>
<td>16.9</td>
</tr>
<tr>
<td>Burundi</td>
<td>19.8</td>
</tr>
<tr>
<td>Rwanda</td>
<td>20.2</td>
</tr>
</tbody>
</table>

*Source: Doing Business database (2013)*

2.2 2.1 Overall competitive conditions

2.2.1 Global Competitiveness

According to the Global Competitiveness Index (GCI) 2012-2013, Rwanda is the country with the highest ranking (63), and improved its ranking by 7 points from the year before (2011-2012). The ranking of Rwanda is considered to be very good for this region, and the only countries in Africa that rank higher than Rwanda are South Africa (52) and Mauritius (54). Burundi ranks the lowest of all economies in the global ranking with the lowest possible ranking of 144. The ranking includes a total of 144 countries, where rank 1 is considered the best and rank 144 the poorest.
As can be seen from the map above the region of Sub-Saharan Africa is looking at the largest challenges in terms of competitiveness (GCI, 2013). A large number of the countries in Africa (of the ones covered in the Global Competitiveness Index) are located in the...
category of economies with the lowest competitiveness (dark blue). There were 32 countries in Africa that were covered in the index of 2013 and only 7 countries are located in the next higher groups (Botswana, Gabon, Namibia and the Seychelles in the medium blue category, while Mauritius, Rwanda and South Africa in the light blue category).

2.2.2 Ease of doing business

With reference to the ease of doing business rank of the World Bank (benchmarked to June, 2012), Rwanda ranks the highest at 52, which is considered to be very good compared to the regional average. Burundi ranks the lowest at 159 and this can be considered a very poor ranking, far below the regional average. As the scale is set from 1 to 185, a rank of 159 indicates that the regulatory environment is not as favorable for the start-up and operation of a local firm (World Bank, 2012). The regional average (Sub-Saharan Africa) is ranked at 140, and Mozambique and Burundi ranks below this.

Figure 17: Global rankings on the ease of doing business (Source: Doing business database, 2013)

![Ease of Doing Business Rankings](image)

Source: Doing business database (2013)

2.2.3 Starting a business

The rank of the ease of starting up a business is set from 1 to 185, where a rank of 1 is the top ranking and 185 is the poorest ranking among all the countries. According to the ease of doing business index for the EAC (World Bank, 2013), Rwanda ranks the highest and also continues to improve its conditions for starting a business (see table below). Globally, this country is also the single low-income economy among the top ten ranking in relation to the ease of starting a business (Doing Business database, 2013). The regional average is ranked at 123 and Kenya and Uganda are ranked below this, which is considered to be poor rankings.

Some large differences can be identified among the EAC countries and Mozambique in terms of the time and the number of procedures that are needed to start a business. For
instance, starting up a business in Rwanda requires about 3 days and 2 procedures, while in Kenya it takes as much as 32 days along with 10 procedures (Doing Business database, 2013).

**Table 10: How do the economies rank on the ease of starting up a business**

<table>
<thead>
<tr>
<th>Economy</th>
<th>Global rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rwanda</td>
<td>8</td>
</tr>
<tr>
<td>Burundi</td>
<td>28</td>
</tr>
<tr>
<td>Mozambique</td>
<td>96</td>
</tr>
<tr>
<td>Tanzania</td>
<td>113</td>
</tr>
<tr>
<td><strong>Regional average (Sub-Saharan Africa)</strong></td>
<td><strong>123</strong></td>
</tr>
<tr>
<td>Kenya</td>
<td>126</td>
</tr>
<tr>
<td>Uganda</td>
<td>144</td>
</tr>
</tbody>
</table>

*Note: Rankings are the average of the economy's rankings on the procedures, time, cost and paid-in minimum capital for starting a business. See the data notes for details (Doing Business database, 2013)*

**Source: Doing Business database (2013)**

2.2.4 Ease of getting credit and financial markets

Kenya ranks the highest of all the 185 countries in relation to ease of getting credit (12), and ranks remarkably higher than the regional average of Sub-Saharan Africa of 109. A ranking of 12 in this context is considered to very good. Burundi ranks the lowest with a score of 167 out of 185 economies, which in contrast is a very poor ranking.

**Table 11: How do the economies rank on the ease of getting credit**

<table>
<thead>
<tr>
<th>Economy</th>
<th>Global rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kenya</td>
<td>12</td>
</tr>
<tr>
<td>Rwanda</td>
<td>23</td>
</tr>
<tr>
<td>Uganda</td>
<td>40</td>
</tr>
<tr>
<td><strong>Regional average (Sub-Saharan Africa)</strong></td>
<td><strong>109</strong></td>
</tr>
<tr>
<td>Tanzania</td>
<td>129</td>
</tr>
<tr>
<td>Mozambique</td>
<td>129</td>
</tr>
<tr>
<td>Burundi</td>
<td>167</td>
</tr>
</tbody>
</table>

*Source: Doing Business database (2013)*

Kenyan capital markets are the most active in the East African region. The Nairobi Stock Exchange (NSE) market capitalization amounted to almost $12.4 billion in 2011 (AFMI 2013), market capitalization was about 46 % of GDP at the end of 2010 (IMF 2012). Kenya
had the highest number of listed domestic companies (55) in East Africa in 2009 and 2010 (IMF 2012). As a comparison, Uganda (Uganda Securities Exchange (USE)) had 8 listed domestic companies, Egypt 305, South Africa 363 and Nigeria 214 in 2009. The Dar es Salaam Stock Exchange (DSE) in Tanzania had 15 listed companies in 2010, with market values of about 15% of GDP. The Rwanda Stock Exchange (RSE) had 2 companies listed in 2010 (IMF 2012). Burundi does not have a stock exchange. The Mozambican stock exchange, the Bolsa de Valores de Moçambique (BVM) opened in 1999, but no listed companies were reported for 2009. All the EAC countries and Mozambique operate government debt markets at different stages of development (IMF 2012).

2.2.5 Corruption

The Corruption Perceptions Index (2012) assesses how corrupt the public sector of a country is perceived to be. The corruption score (the third column) is on a scale of 0 to 100 (where 0 means that a country is perceived as highly corrupt), while the country rank is from 1 to 176 (where 1 is the best rank). Burundi ranks 165 out of 176 on the country rank, while Rwanda scores significantly better with 50.

Table 12: The Corruption Perception Index of 2012

<table>
<thead>
<tr>
<th>Country</th>
<th>Corruption (country rank)</th>
<th>Corruption score (0-100)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mozambique</td>
<td>123</td>
<td>31</td>
</tr>
<tr>
<td>Burundi</td>
<td>165</td>
<td>19</td>
</tr>
<tr>
<td>Rwanda</td>
<td>50</td>
<td>53</td>
</tr>
<tr>
<td>Uganda</td>
<td>130</td>
<td>29</td>
</tr>
<tr>
<td>Tanzania</td>
<td>102</td>
<td>35</td>
</tr>
<tr>
<td>Kenya</td>
<td>139</td>
<td>27</td>
</tr>
</tbody>
</table>

Source: Corruption Perceptions Index (2012)

Figure 18 below illustrates the development of the Corruption Index from 2006 to 2009 for selected countries.
2.2.6 Political risk

According to The Economist Intelligence Unit (2013) the Political Instability Index shows the level of threat posed to governments by social protests. The index scores shown in the table below are measured on a scale from 0 to 10, where 0 indicates no vulnerability to economic distress and unrest and 10 indicate the highest vulnerability. The rank in the table indicates each country’s position on a global scale of 165 countries, where the highest rank is the best (165=best, 1=worst). Kenya’s index score is 7, 5 (2009/10), which is considered to represent a high risk of political instability, where the political and operating environment presents a serious threat for the business environment (Control Risks Group Limited, 2012). Mozambique and Rwanda on the other hand, are associated with a moderate risk of political instability with index scores of 5, 7 and 4, 9 (2009/10) respectively. Their political situation poses fairly sound conditions for the business environment, yet political challenges still exist (Control Risks Group Limited, 2012).

Nonetheless, all countries of the EAC and Mozambique experienced an increase in political risk since 2007 (The Economist Intelligence Unit, 2013).
Table 13: The Political Instability Index

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Kenya</td>
<td>7.5</td>
<td>6.5</td>
<td>Increased</td>
<td>19</td>
</tr>
<tr>
<td>Burundi</td>
<td>6.9</td>
<td>5.9</td>
<td>Increased</td>
<td>47</td>
</tr>
<tr>
<td>Uganda</td>
<td>6.5</td>
<td>3.5</td>
<td>Increased</td>
<td>64</td>
</tr>
<tr>
<td>Tanzania</td>
<td>5.9</td>
<td>4.8</td>
<td>Increased</td>
<td>89</td>
</tr>
<tr>
<td>Mozambique</td>
<td>5.7</td>
<td>5.6</td>
<td>Increased</td>
<td>96</td>
</tr>
<tr>
<td>Rwanda</td>
<td>4.9</td>
<td>3.9</td>
<td>Increased</td>
<td>122</td>
</tr>
</tbody>
</table>

Source: The Economist Intelligence Unit (2013)

2.2.7 Foreign direct investment

The level of foreign direct investment (FDI) in the EAC countries has more than tripled during the last decade from about $590 million in 2000 to around $1.7 billion in 2010 (World Bank, 2012). Compared to the FDI average of Sub-Saharan Africa (SSA) amounting to about 4.3% of GDP in 2009, FDI flows to EAC lie somewhat below this at 2.5% of GDP in 2009 (World Bank, 2012). Although the level of FDI for the EAC is still relatively low, a considerable increase has taken place during the last decade.

The majority of FDI has been targeted towards the sector of natural resources. In Tanzania, the export of gold currently accounts for over 1/3 of their total exports of goods and services. The oil production in Uganda is estimated to represent nearly 10% of GDP, and Kenya has recently been a location for important oil discoveries (World Bank, 2012). However, the region of EAC is facing a challenge in relation to stimulating investments that are directed beyond the sector of natural resources.

Mozambique has also experienced a strong growth in the level of FDI during recent years. See figure 19 below for the development of the level of FDI for the various countries.
As can be seen from the graph above Mozambique experienced a huge increase in the level of FDI inflows from 2010 to 2011, about a doubling to $2.09 billion (UNCTAD, 2012). During 2012, Mozambique has continued to represent a location for large gas reserve discoveries, and the development of these fields along with the liquefied natural gas (LNG) will need massive upfront investments. To develop this industry, the region is heavily dependent on FDI for this sector, also to be able to handle the significant technological challenges that also are expected to take place (UNCTAD, 2012).

See figure 20 for domestic fixed investment rates for selected countries. The domestic fixed rates include inbound FDI.
2.2.8 Foreign aid and foreign direct investment (FDI)

Burundi and Rwanda have been heavily dependent on foreign aid and still represent the most heavily aid dependent countries in comparison to the rest of East Africa. According to African Economic Outlook (2013), Rwanda received about $1.03 billion in 2010 from the US, EU and UK through their memberships in the Organization for Economic Co-operation Development Assistance Committee (African Economic Outlook, 2013). See figure 21 for the development from 2004 to 2008. A recent challenge for Rwanda has been the suspension of aid from numerous development partners due to reports that Rwanda is supporting the insurgents in relation to the conflict in the east part of the Democratic Republic of Congo. The Government of Rwanda rejects this.

It is also important to acknowledge that during recent years Rwanda has managed to reduce its dependence on foreign aid to a certain degree. Foreign direct investment experienced a strong growth by around 50% in 2012, mainly entering into the sectors of energy and banking. Other sectors who attracted new investments included tourism, agro-processing and construction (African Economic Outlook, 2013).
2.2.9 Exports and imports

Below we illustrate the time and cost to export and import for the six countries for 2012. The cost to export is the highest for Rwanda, followed by Uganda Burundi, while Tanzania has the lowest cost to export. The cost to import is the highest for Burundi and Rwanda, while Mozambique has the lowest cost to import.

The time to and cost to export from Uganda is considerably higher compared to Tanzania and Kenya, and this could be due to the poor infrastructure in Uganda and the landlocked country’s strong reliance on the Mombasa port in Kenya (State Government Uganda, 2012)
Being relatively small economies, the EAC countries and Mozambique are all highly dependent on high exports. See figure 23 for total export as share of GDP, which is relatively low for almost all the countries. Numbers for Rwanda and Burundi were not available.
Figure 23: Total exports as a share of GDP, 2010. Africa, Sub-Saharan. (versus GDP per capita, PPP adjusted, 2010)

Source: BI Norwegian Business School Design
2.2.10 Demand conditions

According to The World Bank (2013) urbanization represents a main driver in the fight for poverty reduction. More than 80% of global goods and services are produced in cities, and countries and regions like China, East Asia and Latin America with relatively higher level of urbanization have been able to lower their great poverty levels significantly. Sub-Saharan Africa and South Asia are regions with lower urbanization rates worldwide, which have contributed to their high level of poverty. The table below presents several important aspects of a population that can influence the demand conditions of a country. Demand conditions in this context can be determined by for example the level of sophisticated demand in a population, and important factors include for instance the level of purchasing power, rate of urbanization, the size of the middle class and the level of technological development.
<table>
<thead>
<tr>
<th>Country</th>
<th>Poverty headcount ratio at national poverty line (% of population) (World Bank and CIA World Factbook)</th>
<th>Urbanization (rate of urbanization) (CIA World Factbook)*</th>
<th>Rural population (% of total population) 2012 (World Bank)</th>
<th>Availability of latest technologies Rank 1-144 (GCI 2012-13)**</th>
<th>Internet users (per 100 people) 2011 (World Bank)</th>
<th>Mobile cellular subscription (per 100 people) 2011 (World Bank)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mozambique</td>
<td>54,7% (2009 est.)</td>
<td>3,05%*</td>
<td>69%</td>
<td>111</td>
<td>4,3</td>
<td>33</td>
</tr>
<tr>
<td>Rwanda</td>
<td>44,9% (2011 est.)</td>
<td>4,50%</td>
<td>81%</td>
<td>87</td>
<td>7</td>
<td>41</td>
</tr>
<tr>
<td>Tanzania</td>
<td>33,4% (2007 est.)</td>
<td>4,77%*</td>
<td>73%</td>
<td>122</td>
<td>12</td>
<td>56</td>
</tr>
<tr>
<td>Uganda</td>
<td>24,5% (2009 est.)</td>
<td>5,74%*</td>
<td>84%</td>
<td>104</td>
<td>13</td>
<td>48</td>
</tr>
<tr>
<td>Kenya</td>
<td>45,9% (2005 est.)</td>
<td>4,36%*</td>
<td>76%</td>
<td>74</td>
<td>28</td>
<td>67</td>
</tr>
<tr>
<td>Burundi</td>
<td>66,9% (2006 est.)</td>
<td>4,45%*</td>
<td>89%</td>
<td>144</td>
<td>1,1</td>
<td>22</td>
</tr>
<tr>
<td>Sub-Saharan Africa</td>
<td>-</td>
<td>-</td>
<td>63%</td>
<td>-</td>
<td>12,7</td>
<td>53,3 (developing only)</td>
</tr>
<tr>
<td>South Africa</td>
<td>31,3% (2009 est.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Egypt</td>
<td>20% (2005 est.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Angola</td>
<td>40,5% (2006 est.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>United States</td>
<td>15,1% (2010 est.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Annual rate of change (2010-15 est.)
**Rank 1=best

Source: CIA World Factbook (2013); World Bank (2013); GCI (2012-2013)
From the table above we can see that the percentage of the population living below the national poverty line is particularly high for some of these countries and remains a major challenge. However, Uganda is considered to have a significantly lower percentage than the rest of the EAC countries and Mozambique. In fact, Uganda is also below both South Africa and Angola and has almost as low percentage as Egypt. Tanzania also has a lower percentage compared to the other countries in the EAC and Mozambique.

Among the EAC countries and Mozambique the annual rate of change in urbanization is estimated to be quite similar. Uganda has the highest urbanization rate of 5.74%, followed by Tanzania and Rwanda. All the countries are below the Sub-Saharan African average in terms of rural population as a percentage of total population, which amounts to 63%. Tanzania and Mozambique have the lowest percentage of rural population, and this could indicate a potential for higher purchasing power and sophistication among their population. Mozambique is the country with the smallest percentage of rural population (69%) but also the lowest rate of urbanization. In relation to internet users per 100 people, Kenya is well above the Sub-Saharan average of 12.7. Kenya has 28 internet users per 100 people, which can be considered to be a pretty high number for this region. Kenya is also the country with the highest number of cellular mobile subscriptions per 100 people, and both Kenya and Tanzania are above the Sub-Saharan average of 53.3 per 100 people.

Size of the middle classes
The figures below show the size of the middle classes in percentage in the EAC countries and Mozambique with and without floating class*. 

---
The figures represent a percent of middle class with and without the “floating” class. “Floating” class represent a lower middle class that lives on less than $4 per day with the ever present danger of falling into poverty in the event of exogenous economic shocks. Middle class without floating class: 4$-20$. Middle class with floating class 2$-20$. 

**Source: African Development Bank (2012)**

The size of the middle class for these countries can be considered to be fairly low, but gradually growing. Kenya is almost at the same level as South Africa in terms of its size of middle class, which amounted to 43, 2% with floating class and 19, 8% without floating class for South Africa in 2010. To be able to compare the size of the middle classes for the countries above we have compared them to some other African countries that are considered to have some of the largest middle classes in Africa. Tunisia has the largest size of middle class both with and without floating class, amounting to 89, 5% and 45, 6% respectively. Morocco also has a large middle class with 84, 6% with floating class and 27, 2% without floating class, followed by Egypt amounting to 79, 7% with floating class and 31, 6% without floating class.

From the figures above Kenya (44, 9% and 16, 8%) and Uganda (18, 7% and 8, 1%) have the highest percentage of middle class in their population, which can indicate that these two countries generally have a more sophisticated demand compared to the other countries. In
addition, Kenya and Uganda also have high availability and absorption of the latest technologies along with a high number of Internet users and mobile phone subscriptions (from the table above) compared to the other countries, which also suggests a more sophisticated demand in these countries.

**Market and population size**
The table below shows the size of the domestic and foreign market for each country as well as the population, population growth rate and percentage of population below 14 years.

**Table 15: Size of domestic and foreign markets**

<table>
<thead>
<tr>
<th>Rank</th>
<th>Domestic Market Size Rank (1-144)*</th>
<th>Foreign Market Size Rank (1-144)*</th>
<th>Population (CIA World Factbook) 2013</th>
<th>Population growth rate (CIA World Factbook) 2013</th>
<th>Percentage below 14 years (CIA World Factbook) 2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kenya</td>
<td>69</td>
<td>87</td>
<td>44,037,656</td>
<td>2.27%</td>
<td>42.4%</td>
</tr>
<tr>
<td>Tanzania</td>
<td>73</td>
<td>83</td>
<td>48,261,942</td>
<td>2.82%</td>
<td>44.8%</td>
</tr>
<tr>
<td>Uganda</td>
<td>80</td>
<td>105</td>
<td>34,758,809</td>
<td>3.32%</td>
<td>48.9%</td>
</tr>
<tr>
<td>Mozambique</td>
<td>100</td>
<td>107</td>
<td>24,096,669</td>
<td>2.44%</td>
<td>45.5%</td>
</tr>
<tr>
<td>Rwanda</td>
<td>124</td>
<td>138</td>
<td>12,012,589</td>
<td>2.7%</td>
<td>42.3%</td>
</tr>
<tr>
<td>Burundi</td>
<td>138</td>
<td>143</td>
<td>10,888,321</td>
<td>3.08%</td>
<td>45.6%</td>
</tr>
</tbody>
</table>

*Rank 1=best/largest market

**Source: GCI 2012-13/CIA World Factbook, 2013**

Kenya and Tanzania are more or less comparable in terms of their population size. Kenya’s larger domestic market (defined as sum of gross domestic product plus value of imports of goods and services, minus value of exports of goods and services) is offset by its smaller foreign market (defined as value of exports of goods and services). In the case of Uganda and Mozambique significantly larger domestic size for Uganda is not balanced off with foreign market size relatively to Mozambique (GCI 2012-13).

More than 40% of the population in the EAC and Mozambique are below the age of 14 (CIA Factbook, 2013). Although a young population provides opportunities for a larger workforce and consumer base in a country, which both can represent important drivers for economic growth, this can also pose some serious challenges. Improved level of education and availability of education for young people will be essential for these countries to ensure
employment of this part of their population. As education is a major challenge for most of these countries, this young proportion of the population needs to be highly prioritized.

2.3.1 Transition economies

The African market has been experiencing tremendous development in recent years, which has involved a transition in economies, from agricultural to urban economies, giving a rise to economic growth through the service-related sectors. A decrease in the share of GDP from agriculture and natural resources enables growth in manufacturing and service industries, which in turn facilitates jobs and increased levels of income, and thereby increased domestic demand. Generally, a 15% increase in the manufacturing or service sector as share of GDP is related to a double increase of income per capita.

The EAC countries and Mozambique have a relatively low export per capita. Emerging economies are highly depending on income from export activities to make large and necessary improvements in the economic infrastructure at home. This is because it is an important way to finance the capital goods that are being imported. It is essential as import of capital goods accounts for approximately 50% of all investments made in Africa, and these investments are necessary to diversify. Therefore boosting exports to finance those investments is necessary for African markets to expand (McKinsey, 2010).

According to a comprehensive framework of McKinsey (2010) most of the countries in Africa can be categorized into four main groups: diversified economies, oil exporters, transition economies and pre-transition economies (see figure 25 below). It is important to emphasize that countries within each group can be different in many aspects, but the structures and challenges of their economies are similar.

The figure below shows the four groups of economies and where the different countries are located. We see that Kenya is located in the transition group of economies but moving closer towards a more diversified economy followed by Mozambique and Uganda. Rwanda is the least diversified economy located in between the transition and pre-transition group (Burundi is not included in the figure). Below the four groups are explained in more detail.

* Alan Gelb, Vijaya Ramachandran, and Manju Kedia Shah, Africa’s Private Sector: What’s Wrong with the Business Environment and What to Do About It, Center for Global Development,
The diversified economies can be considered the growth engines of Africa and include the most advanced economies of the continent: Egypt, Morocco, South Africa and Tunisia. These economies are highly diversified and have experienced the most stable growth in GDP. The manufacturing and service sectors in these countries together account for 83% of their total GDP.

The oil exporters are the economies that are the least diversified, but as oil and gas exporters have the highest GDP per capita. The economic growth of these economies is highly related to oil and gas prices, and this group consists of the following countries: Algeria, Angola, Chad, Congo, Equatorial Guinea, Gabon, Libya, and Nigeria. The oil exporters are generally considered to have great potential for further growth if they are able to take advantage of their petroleum wealth by financing a wider development of their economies. Some key elements for this group of countries will be to ensure investments to improve infrastructure and education, as well as to implement additional economic reforms to foster a more dynamic business sector.

The majority of the EAC and Mozambique are considered to be transition economies, along with Cameroon, Ghana, Senegal and Zambia. The economies in this group have lower GDP per capita compared to the two first groups (diversified economies and oil exporters). Although some of the transition economies depend strongly on one commodity such as aluminum for Mozambique, this group is in the process of diversifying their sources of growth. Kenya and Uganda are considered to be some of the more diversified economies.
within the group. In the transition countries the sector of agriculture and resources contribute to about 35% of GDP, which again accounts for 2/3 of their exports. A trend identified in this context is the increased export of manufactured goods such as processed fuels, processed foods, chemicals, apparel and cosmetics. Additionally, the export of transition economies is increasingly directed towards other countries in Africa.

Key to ensure future growth of the transition economies is to expand the trade between the African countries. Although the countries are considered small separately a regional integration can create larger markets with greater prospects. The countries could also get the possibility of competing on a global level with other low-cost emerging economies if they put emphasis on upgrading their infrastructure and regulatory systems (McKinsey, 2010). This is particularly important as a study undertaken by the Center of Global Development* (2009) reported that factories in the transition countries are just as productive as in China and India. The difference is that due to poor infrastructure and regulations the total costs are higher for the transition countries, which are both challenges that can be met with the correct reforms. Moreover, opportunities for businesses exist in the rapidly expanding local service sectors that are characterized by unmet demand. This include for instance telecommunications, banking and retailing, which are all sectors that are growing fast but with much lower penetration rates compared to the diversified economies.

Finally, the pre-transition economies are considered to be very poor with GDP per capita of only a tenth of the diversified economies. This group consists of countries like the Democratic Republic of the Congo, Ethiopia, Mali, and Sierra Leone. Although these economies might differ in terms of individual circumstances they all face some common key challenges. An example of this is the lack of basics such as political stability through a strong and stable Government and good macroeconomic conditions. In addition, other challenges common for these economies include avoiding conflict and upholding peace, developing a more predictable business environment and ensuring the right economic foundations.

The figure below shows the four economies in terms of their GDP per capita, exports composition, share of manufacturing and service sector and political risk index. For the transition economies the manufacturing and service sector accounted for 72% of GDP in 2008, compared to 83% for the diversified economies, which indicates that the transition economies is not so far behind this group.
Figure 26: The four groups of economies in terms of their GDP, exports, diversification and political risk, 2008

Source: Organization for Economic Cooperation and Development, World Bank World Development Indicators, McKinsey Global Institute
3. Clusters in the EAC and Mozambique

3.1 Clusters in Tanzania

3.1.1 Cluster Competitiveness Programme in Tanzania

In 2010, the Tanzania Private Sector Foundation (TPSF) initiated the Cluster Competitiveness Programme (CCP), which is a 3-year program seeking to improve the competitiveness of six strategic clusters with high potential in Tanzania. Three of the chosen clusters have been the focus area until now, namely food processing, horticulture and tourism. The programme is funded by a donor fund through the World Bank and offers support and assistance in various forms of industry training, development of enhanced capacity capabilities of associations and institutions and improved communication between government and industry amongst other things (Tanzania Private Sector Foundation, 2010).

3.1.2 Exports by cluster

Figure 27 below shows the value of goods exported from the largest clusters in Tanzania (based on the most recent year available). Jewelry, precious metals and collectibles is the cluster with the largest value of exported goods. The number next to the bar indicates the rank of Tanzania among all reporting countries for exported goods in the cluster. The hospitality and tourism cluster is the second largest, and ranks 69 among the countries for exported goods in this cluster.
Figure 27: Exports by cluster (value of a nation’s goods exports in $ the most recent year available)

Figure shows the value of goods exported from the largest clusters (based on the most recent year available). The number next to the bar indicates the rank of the country among all reporting countries for exported goods in the cluster.

3.1.3 Exports portfolio by cluster

The figure below (figure 28) is a comprehensive graphic illustration of the different clusters in Tanzania. It focuses on the various clusters’ world export share in 2010 (y-axis - can be interpreted as market shares, global export share for relevant cluster), the average change in the country’s share of export from the clusters in the period of 2000 to 2010 (x-axis) and the size of the clusters in terms of exports relative to other clusters in the country (size of the circle). The figure also shows the country’s overall average of world export share in 2010 and the average change in the country’s share of exports from 2000 to 2010 through the dashed lines vertically and horizontally respectively. Being above the line indicates that that the cluster is relatively specialized for the nation. Located to the right of the line means that the cluster is gaining share faster than what the nation is gaining (or losing) in share of global goods exports overall. This part of the report presents the largest and most important clusters in terms of exports for Tanzania based on the figure design used in figure 28 and will also be used for all the other countries.
Figure 28: Exports portfolio by cluster

The figure is a comprehensive graphic illustration of the different clusters in the country. It focuses on the various clusters' world export share in 2010 (y-axis - can be interpreted as market shares, global export share for relevant cluster), the average change in the country's share of export from the clusters in the period of 2000 to 2010 (x-axis) and the size of the clusters in terms of exports relative to other clusters in the country (size of the bubble). The figure also shows the country's overall average of world export share in 2010 and the average change in the country's share of exports from 2000 to 2010 through the dashed lines vertically and horizontally respectively. Being above the line indicates that the cluster is relatively specialized for the nation. Being to the right of the line means that the cluster is gaining share faster than what the nation is gaining (or losing) in share of global goods exports overall.
The figure is a comprehensive graphic illustration of the different clusters in the country. It focuses on the various clusters’ world export share in 2010 (y-axis - can be interpreted as market shares, global export share for relevant cluster), the average change in the country’s share of export from the clusters in the period of 2000 to 2010 (x-axis) and the size of the clusters in terms of exports relative to other clusters in the country (size of the bubble). The figure also shows the country’s overall average of world export share in 2010 and the average change in the country’s share of exports from 2000 to 2010 through the dashed lines vertically and horizontally respectively. Being above the line indicates that that the cluster is relatively specialized for the nation. Being to the right of the line means that the cluster is gaining share faster than what the nation is gaining (or losing) in share of global goods exports overall.
3.1.4 Service clusters excluded in Tanzania

The figure below shows the clusters in Tanzania excluding the services clusters.

**Figure 30: Services Clusters excluded**

![National Cluster Export Portfolio Tanzania, 2000 – 2010](image)

The figure is a comprehensive graphic illustration of the different clusters in the country. It focuses on the various clusters’ world export share in 2010 (y-axis - can be interpreted as market shares, global export share for relevant cluster), the average change in the country’s share of export from the clusters in the period of 2000 to 2010 (x-axis) and the size of the clusters in terms of exports relative to other clusters in the country (size of the bubble). The figure also shows the country’s overall average of world export share in 2010 and the average change in the country’s share of exports from 2000 to 2010 through the dashed lines vertically and horizontally respectively. Being above the line indicates that the cluster is relatively specialized for the nation. Being to the right of the line means that the cluster is gaining share faster than what the nation is gaining (or losing) in share of global goods exports overall.
3.1.5 Jewelry, precious metals and collectibles cluster

The cluster of jewelry, precious metals and collectibles consists primarily of gold, silver, platinum and other precious metals and collectibles. This cluster is the largest cluster in Tanzania in terms of exports in comparison to the rest of the clusters in the country indicated by the size of its circle. The world export share of the cluster in 2010 is almost 0.4% in absolute terms. As the circle of this cluster appears far up in the right corner this indicates that Tanzania has a large share in this cluster relative to its exports from other clusters. Additionally, the cluster has enjoyed an increase in its share of exports in the cluster at a more rapidly pace compared to the pace of the total exports worldwide from this cluster. The average change in Tanzania’s share of exports in the period between 2000 and 2010 has been
significantly large for the cluster of jewelry precious metals and collectibles in relative terms (in comparison to the rest of the clusters in Tanzania), amounting to 0.22%.

The cluster is also located above the dashed line horizontally indicating the country’s overall average share of global exports in traded goods, and to the right of the dashed line vertically indicating the change over time (from 2000 to 2010) in the country’s overall average share of global exports in traded goods.

3.1.6 Sub-cluster – Precious metals

The graph below shows the sub-clusters of the cluster jewelry, precious metals and collectibles. The largest sub-cluster in terms of exports in Tanzania is precious metals.

Figure 32: Exports portfolio for sub-cluster jewelry, precious metals and collectibles

The figure is a comprehensive graphic illustration of the different clusters in the country. It focuses on the various clusters’ world export share in 2010 (y-axis - can be interpreted as market shares, global export share for relevant cluster), the average change in the country’s share of export from the clusters in the period of 2000 to 2010 (x-axis) and the size of the clusters in terms of exports relative to other clusters in the country (size of the bubble). The figure also shows the country’s overall average of world export share in 2010 and the average change in the country’s share of exports from 2000 to 2010 through the dashed lines vertically and horizontally respectively. Being above the line indicates that that the cluster is relatively specialized for the nation. Being to the right of the line means that the cluster is gaining share faster than what the nation is gaining (or losing) in share of global goods exports overall.
The sub-cluster of precious metals is located far up in the right corner indicating a specialized sub-cluster with a world export share of 0.69% and an export value of $1,427,791,000 in 2010. The average change in share of exports from 2000 to 2010 amounted to 0.36%. The considerably smaller sub-cluster in terms of exports, precious stones, had a world export share in 2010 of 0.8%.

The largest reserves of gold in Africa are considered to be located in South Africa, but closely followed by Tanzania. Consequently, Tanzania has been a principal area of focus in relation to development and exploration of gold in Africa, and a large part of the expenditure of exploration in Africa has been attracted by Tanzania, amounting to about 15% (Tanzania Invest, 2013). The export of gold in Tanzania currently accounts for over 1/3 of their total exports of goods and service (World Bank, 2012). One of the main reasons for the growth in this cluster is the large increase in gold exports from Tanzania due to high gold prices.

3.1.7 Hospitality and tourism cluster

Tanzania is the largest country in East Africa and a land with geographical extremes featuring the highest and lowest peak in Africa, Mount Kilimanjaro and the lake bed of Lake Tanganyika, and also the largest lake, Lake Victoria (Tanzania Tourist Board, 2013). It is a country with an abundance of wildlife, safaris, national parks and it is also very famous for its beaches in Zanzibar and attractions such as the Ngorongoro Crater and the Mafia Island to mention a few. Consequently, Tanzania represents a highly attractive tourist destination in Africa.

The hospitality and tourism cluster has seen a steady increase in the number of visitors since 2003 to 2011 (World Bank, 2013). It is one of the chosen clusters for the Cluster Competitiveness Programme in Tanzania as it is considered with high potential. According to the World Bank (2013) the hospitality and tourism cluster in Tanzania generated about $1,487,000,000 in 2011. This number is based on the international tourism receipts that year (expenditures by international inbound visitors).

From the export portfolio by cluster graph (figure 28) in the beginning of this section, this cluster is the second largest cluster in Tanzania by exports in relative terms. The cluster had 0.14% of world export share in 2010 and an average change in share of exports in the period between 2000 and 2010 of 0.06%.

A main challenge for this cluster is the strong competition faced from its neighbor Kenya. The two countries offer very similar attractions in terms nature, wildlife, national parks and beaches, but the total number of visitors in Tanzania in 2010 amounted to about 754,000 compared to around 1,470,000 for Kenya (World Bank, 2010).

3.1.8 Agricultural products cluster

The agricultural sector of Tanzania currently employs about 80% of the workforce in the country. This also accounts for around ⅔ of the country’s merchandise exports as well as about 50% of the national income (Tanzania Invest, 2013). The agriculture cluster of Tanzania is the third largest cluster in the country in terms of export value in relative terms.
The circle for this cluster is positioned to the left of the dashed line vertically (indicating the change over time in the country’s overall average share of global exports in traded goods). This means that the cluster is below the average change from 2000 to 2010 of the country’s share of global exports, and the cluster has experienced no change in share of global exports during this period. The sector of agriculture has experienced slow growth rates during the last decade due to low productivity and underperformance of the sector in general (African Economic Outlook, 2013).

3.1.9 Sub-clusters of agricultural products

There are several sub-clusters of the agricultural products cluster and the two largest in terms of export value in relative terms in Tanzania are vegetables and fruits and coffee, tea cocoa and spices (see figure below). Although fairly small in size (exports relative to other clusters in Tanzania) the sub-cluster of plants and flowers has been the fastest growing cluster of all the sub-clusters with an average change in the share of exports of almost 0.2% from 2000 to 2010. The sub-cluster of coffee, tea, cocoa and spices had a world export share of 0.32% in 2010, but a negative average change in export share from 2000 to 2010 of 0.28%. The vegetables and fruits sub-cluster had a world export share of 0.13% in 2010 and no change in export share from 2000 to 2010. The sub-cluster of fertilizers had a world export share of 0.12% in 2010 and an average change in export share of 0.11% from 2000 to 2010.
Figure 33: Agricultural products cluster

The figure is a comprehensive graphic illustration of the different clusters in the country. It focuses on the various clusters’ world export share in 2010 (y-axis - can be interpreted as market shares, global export share for relevant cluster), the average change in the country’s share of export from the clusters in the period of 2000 to 2010 (x-axis) and the size of the clusters in terms of exports relative to other clusters in the country (size of the bubble). The figure also shows the country’s overall average of world export share in 2010 and the average change in the country’s share of exports from 2000 to 2010 through the dashed lines vertically and horizontally respectively. Being above the line indicates that that the cluster is relatively specialized for the nation. Being to the right of the line means that the cluster is gaining share faster than what the nation is gaining (or losing) in share of global goods exports overall.

3.1.10 Sub-cluster – Horticulture

As mentioned earlier, the Cluster Competitiveness Programme in Tanzania has chosen horticulture as one of their three major focus areas. The Tanzania Horticultural Association (TAHA) was established in 2005 with the objective of growing, promoting and developing the horticulture industry in Tanzania. The horticulture sector consists of flowers, fruits, vegetables, spices, herbs and horticultural seeds (TAHA, 2013). During the last decade, the horticulture sub-cluster has experienced significant growth. Nonetheless, this sub-cluster only accounts for a very small proportion of the overall sector of agriculture by volume (HODECT, 2010). Horticulture contributes largely to the areas of food security, improvements for nutrition and economic growth. It is a fast-growing sector with an annual growth rate during the last three years of about 8-10% (TAHA, 2013).
The Tanzania Horticultural Development Strategy 2012-2021 is an initiative established by horticulture stakeholders with the aim of identifying and exploiting the rapidly growing demand and the national and global markets opportunities available. The sub sector is categorized as one of the top prioritized sectors in the National Export Strategy (2008) of Tanzania and is also considered significant when it comes to avoiding overdependence on traditional agricultural products and being able to diversify the sector of agriculture.

The export earnings (which are mainly to Europe) from horticulture have experienced a remarkable increase from around $10 million in 2000 to $150-160 million in 2010 (IGC, 2010). Additionally, the industry has benefited more than 300,000 Tanzanians directly during the same period. A huge potential exists in the horticulture sector as less than 5% of the total of 500,000 hectares of suitable land is currently being cultivated.

The Tanzanian high-value vegetable (HVV) cluster for instance is a recently established sub sector of agriculture and horticulture with high potential, although it has remained fairly small. The high-value vegetable cluster consists of vegetables that that are grown in compliance with best practices to be able to meet international standards for quality and safety.

In the industry of cut flowers, African countries such as Kenya, Ethiopia, Zimbabwe, Zambia, Uganda and Tanzania represent some of the strongest competitors of the European producers. These African producers rely almost wholly on the market in Europe, but they are also attempting to enter into new markets in Asia, the Middle East and North America (Trade for Development Centre, 2010).

Finally, some of the challenges in relation to the horticulture sector include strict standards and regulations from the countries importing the goods, poor infrastructure and difficulties in getting the goods to the market in good conditions. In addition, many of the exporters in the horticulture industry are small in size and face difficulties for instance in relation to the transportation of goods through airlines due to minimum economic size for freight to the EU requirements (most small exporters are below the size) (GCI, 2010).

3.1.11 Sub-cluster – Coffee, tea, cocoa and spices

The size of the circle of the coffee, tea, cocoa and spices cluster in figure 33, demonstrates that this is the second largest sub-cluster of agriculture in terms of export value in Tanzania (in relative terms). However, this sub-cluster has experienced a negative change in the share of exports of almost 0, 3% between 2000 and 2010. In 2010, the sub-cluster had a world export share of 0, 32%.

3.1.12 Sub-cluster – Fertilizers

The sub-cluster of fertilizers is not one of the largest sub-clusters of agriculture, but it is one of the sub-clusters who have experienced the largest positive change in the share of exports from 2000 to 2010. In October 2012, the agriculture industry in Tanzania was approved an amount of $25 million from the World Bank of Executive Directors on behalf of the International Development Association to ensure timely delivery of fertilizer and seeds to
about 300,000 farmers, ultimately to boost the productivity in the sector. The sector was also granted another $30 million to provide farmers with access to up to date knowledge and technology on agriculture and farming as well as irrigation infrastructure (World Bank, 2012).

3.1.13 Fishing and fishing products cluster

The fishing and fishing products cluster is a fairly small cluster in terms of exports compared to other clusters in Tanzania, but relevant for Norwegian industries. The cluster had a world export share in 2010 of 0, 14% and a negative change in share of exports between 2000 and 2010 of about 0, 01%. The cluster is primarily made up by the sub-clusters of fishing and processed seafoods. The sub-cluster of fishing is the largest sub-cluster in terms of export value and this sub-cluster had a world export share of 0, 14% in 2010, while the sub-cluster had a negative average change in export share from 2000 to 2010 of 0, 02%. The sub-cluster of processed seafoods had a world export share of 0, 25% in 2010 and an average change in export share from 2000 to 2010 of 0, 23%.
According to the Food and Agriculture Organization of the United Nations (2007), fish in Tanzania accounts for about 2.9% of GDP. The demand for fish in Tanzania is pretty high, particularly due to its growing population. To be able to meet this demand the Government tries to focus on the use of aquaculture as a strategy for this industry.

Aquaculture in Tanzania is considered to be a cluster with strong, but yet untapped potential. Freshwater fish farming is the dominant sector of the industry and the country is estimated to have about 14,100 fishponds of freshwater distributed over the mainland (Fisheries and Aquaculture Department, 2013). During recent years, an increased popularity in the area of seaweed farming has been detected, particularly along the coastline of the country. These are often small-scaled seaweed farms operated by groups of women and youth.
The fish and fisheries products from Tanzania are primarily sold to consumers in the domestic market and also to neighboring countries (this includes the South African Development Community). On a global level, the European Union and Asian countries represent the main markets particularly for Nile perch fillets and shrimps (Food and Agriculture Organization of the United Nations, 2007).

Lastly, the cluster offers attractive investments opportunities within several areas including capture fisheries, fish processing, aquaculture, manufacturing of fishing craft and gears and fish marketing (Food and Agriculture Organization of the United Nations, 2007).

3.1.14 Services clusters in Tanzania
The three largest services clusters in Tanzania include hospitality and tourism, transportation and logistics and business services (see figure below). Hospitality and tourism is the largest service cluster of the three in terms of exports in Tanzania, and also the cluster with the largest change in share of exports between the period of 2000 and 2010.
The figure is a comprehensive graphic illustration of the different clusters in the country. It focuses on the various clusters’ world export share in 2010 (y-axis - can be interpreted as market shares, global export share for relevant cluster), the average change in the country’s share of export from the clusters in the period of 2000 to 2010 (x-axis) and the size of the clusters in terms of exports relative to other clusters in the country (size of the bubble). The figure also shows the country’s overall average of world export share in 2010 and the average change in the country’s share of exports from 2000 to 2010 through the dashed lines vertically and horizontally respectively. Being above the line indicates that the cluster is relatively specialized for the nation. Being to the right of the line means that the cluster is gaining share faster than what the nation is gaining (or losing) in share of global goods exports overall.

Exports to world regions

An interesting development in relation to Tanzania’s exports is the strong increase in share of exports to Sub-Saharan Africa and East Africa, as illustrated in the figure below. This clearly demonstrates that trade is increasingly occurring among regions in Africa. Tanzania is exporting a large proportion of their goods to neighboring countries, which implies increased cooperation and coordination among these countries. Around 16% of Tanzania’s exports went to Europe in 2010, and consequently this region also represents a significant partner for Tanzania’s exports.
Figure 36: Tanzania’s goods exports share to world regions

Source: BI: Norwegian Business School Design
The largest trade partners of Tanzania

Switzerland and China represent by far the largest trade partners of Tanzania in terms of exports followed by South Africa and Kenya. The change over time (2000 to 2010) in share of exports to Switzerland and China has been between 8 and 9 %, and almost 5% to South Africa.

Figure 37: Goods exports share to leading trade partners in Tanzania

In April 2012, Tanzania’s exported goods and services were estimated to be worth about $7 billion. An interesting development in this context is the strong increase in Tanzania’s exports to the EAC, particularly after the EAC Common Market protocol entered into force in 2010 (Trademark East Africa, 2013). With reference to Trademark East Africa (2013) the major export goods from Tanzania to Switzerland, China and South Africa include gold and other precious metals (diamond and tanzanite).

The majority of the exported goods from Tanzania to Switzerland, China, Kenya, South Africa and India include gold, coffee, cashews, cotton and manufactured products and service (Global trade, 2013). Some of Tanzania’s largest import partners include India, South Africa, the United Arab Emirates and Japan, and a large part of the imports consists of consumption goods, machinery, transport equipment, industrial products and crude oil.
3.1.15 Cluster initiatives in Tanzania

In addition to the Cluster Competitiveness Programme by the Tanzania Private Sector Foundation (TPSF), several other cluster initiatives have taken place in Tanzania. Below is a list from 2008 that portrays all the initiatives accounting for 36 clusters under development.

Table 16: Cluster Development Initiatives

<table>
<thead>
<tr>
<th>Cluster Initiative</th>
<th>Cluster Initiative</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Bagamoyo cultural heritage tourism</td>
<td>19 Bio Fuel (DSM &amp; Morogoro)</td>
</tr>
<tr>
<td>2 Eastern region mushroom</td>
<td>20 Mushroom Pemba</td>
</tr>
<tr>
<td>3 Morogoro metal works</td>
<td>21 Mushroom Ruvuma</td>
</tr>
<tr>
<td>4 Morogoro small scale fruit and vegetables food processors</td>
<td>22 Beekeeping Manyoni</td>
</tr>
<tr>
<td>5 Arusha seeds</td>
<td>23 Metal works DSM</td>
</tr>
<tr>
<td>6 Tanga/Korogwe Sisal</td>
<td>24 Oilseeds Singida</td>
</tr>
<tr>
<td>7 Zanzibar seaweeds</td>
<td>25 Fruit production Njombe</td>
</tr>
<tr>
<td>8 DSM Nutraceuticals (functional foods)</td>
<td>26 Oilseed Manyara</td>
</tr>
<tr>
<td>9 Building Construction (DSM)</td>
<td>27 Rice Manyara</td>
</tr>
<tr>
<td>10 Educational Services (DSM)</td>
<td>28 Furniture DSM</td>
</tr>
<tr>
<td>11 ICT (DSM)</td>
<td>29 Basketry Iringa</td>
</tr>
<tr>
<td>12 Textile Handcraft (DSM)</td>
<td>30 Cashew nut Mtwara</td>
</tr>
<tr>
<td>13 Oil Seeds (Dodoma)</td>
<td>31 Container gardens DSM</td>
</tr>
<tr>
<td>14 Cassava Processing (Kibaha)</td>
<td>32 Wine Dodoma</td>
</tr>
<tr>
<td>15 Wood Carvings (DSM)</td>
<td>33 Onions Iringa</td>
</tr>
<tr>
<td>16 Heritage Tourism (Tanga)</td>
<td>34 Poultry DSM</td>
</tr>
<tr>
<td>17 Kilindini Small Scale Gemstone Mining (Tanga)</td>
<td>35 Fish farming Nyumba ya Mungu</td>
</tr>
<tr>
<td>18 Rice Processing (Morogoro)</td>
<td>36 Furniture Morogoro</td>
</tr>
</tbody>
</table>

Source: Cluster Initiatives East Africa (2008)

The Innovation Systems & Clusters Programme in East Africa

In 2004, the Innovation Systems & Clusters Programme (ISCP-EA) was established with the aim of introducing local clustering initiatives to stimulate competitiveness with a focus on the EAC countries. The university-led regional program has currently been implemented in Tanzania, Mozambique and Uganda.
3.2 Clusters in Mozambique

Mozambique has experienced strong growth during the last decade with an average annual GDP growth rate of 7.2% (African Economic Outlook, 2012). The country represents one of Africa’s rising economies, although it was ranked among the lowest on the global index for human development (184 out of 187 countries according to the United Nations Human Development Index) in 2011. Mozambique has also recently moved into the category of emerging resource-rich countries with significant natural gas reserves discoveries along with large investments in the coal sector. Significant foreign investments remain attracted to the country due to its geographic location representing an important doorway to the Indian Ocean and global markets, although development in the country can be considered slow (African Economic Outlook, 2012).

3.2.1 Exports by cluster

The figure below shows the value of goods exported from the largest clusters in Mozambique (based on the most recent year available). Metal, mining and manufacturing is by far the cluster with the largest value of exported goods. The number next to the bar indicates the rank of Mozambique among all reporting countries for exported goods in the cluster. The power and power generation equipment cluster is the second largest, and ranks 40 among the countries for exported goods in this cluster.
Figure 38: Exports by cluster (value of a nation’s goods exports in $ the most recent year available)

Figure shows the value of goods exported from the largest clusters (based on the most recent year available). The number next to the bar indicates the rank of the country among all reporting countries for exported goods in the cluster.
### 3.2.2 Exports portfolio by cluster

Metal, mining and manufacturing is by far the largest cluster in Mozambique in terms of exports compared to the other clusters in the country. However, the cluster has not experienced the largest average growth in terms of export share compared to all the other clusters in Mozambique from 2000 to 2010. The tobacco cluster and the power and power generation equipment clusters are the ones with the strongest average increase in share of exports during this period, a change of 0.4% and 0.11% respectively.

**Figure 39: Exports portfolio by cluster for Mozambique**

The figure is a comprehensive graphic illustration of the different clusters in the country. It focuses on the various clusters’ world export share in 2010 (y-axis - can be interpreted as market shares, global export share for relevant cluster), the average change in the country’s share of export from the clusters in the period of 2000 to 2010 (x-axis) and the size of the clusters in terms of exports relative to other clusters in the country (size of the bubble). The figure also shows the country’s overall average of world export share in 2010 and the average change in the country’s share of exports from 2000 to 2010 through the dashed lines vertically and horizontally respectively. Being above the line indicates that that the cluster is relatively specialized for the nation. Being to the right of the line means that the cluster is gaining share faster than what the nation is gaining (or losing) in share of global goods exports overall.

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3.2.3 Metal, mining and manufacturing cluster

The metal, mining and manufacturing cluster had an export value of $1.198.526.000 in 2010 and a world export share of 0.1%. The change in share of exports from 2000 to 2010 was 0.09%, which was above the overall average change in the country’s share of exports between that same period. The cluster consists primarily of the sub-cluster referred to as other metals (see figure below). This sub-cluster is located in a favorable position far up in the right corner of the graph, indicating a specialized sub-cluster with a world export share of about 0.65% in 2010. The sub-cluster enjoyed a positive average change in share of exports of 0.56% from 2000 to 2010.
The figure is a comprehensive graphic illustration of the different clusters in the country. It focuses on the various clusters' world export share in 2010 (y-axis - can be interpreted as market shares, global export share for relevant cluster), the average change in the country’s share of export from the clusters in the period of 2000 to 2010 (x-axis) and the size of the clusters in terms of exports relative to other clusters in the country (size of the bubble). The figure also shows the country’s overall average of world export share in 2010 and the average change in the country’s share of exports from 2000 to 2010 through the dashed lines vertically and horizontally respectively. Being above the line indicates that that the cluster is relatively specialized for the nation. Being to the right of the line means that the cluster is gaining share faster than what the nation is gaining (or losing) in share of global goods exports overall.

The extractive industry in Mozambique has not accounted for a large part of the country’s GDP, only about 1, 1% in 2010 according to the National Institute of Statistics, compared to agriculture which accounted for 19, 4 % of GDP (E&Y, 2010). A reason for this include that large-scale mining exploration was until recently almost non-existent. Some smaller- and medium-sized mining projects have existed in the areas of gold, tantalite, semiprecious stones, marble and coal to mention some. However, during the last decade a focus on the work of exploration and prospecting of resources has contributed to a new dynamic in the industry, which mainly has been a result from international demand for mineral resources along with a more stable country in terms of political and economic aspects (E&Y, 2010).
Further, it is not unknown that Mozambique has during recent years been a popular and privileged destination for foreign investors with a strong emphasis on large multinationals directed towards projects of significant impact in the context of the national economy. The outcome of this rush has been an exponential growth in the investments in the sector of mining and hydrocarbons, which also indicates that during the next few years the sector will have the potential to easily reach or surpass $10 billion. In addition to the recently large natural gas discovery in Rovuma Basin (in the north of Mozambique), minerals can now be found all over the country (E&Y, 2010).

3.2.4 Power and power generation equipment cluster

The power and power generation equipment cluster is primarily made up by the sub-cluster electric energy. This sub-cluster is located in a very favorable position in the figure below and has a world export share in 2010 of 0.86% along with an average change in share of exports (between 2000 and 2010) of 0.17%.
The figure is a comprehensive graphic illustration of the different clusters in the country. It focuses on the various clusters’ world export share in 2010 (y-axis - can be interpreted as market shares, global export share for relevant cluster), the average change in the country’s share of export from the clusters in the period of 2000 to 2010 (x-axis) and the size of the clusters in terms of exports relative to other clusters in the country (size of the bubble). The figure also shows the country’s overall average of world export share in 2010 and the average change in the country's share of exports from 2000 to 2010 through the dashed lines vertically and horizontally respectively. Being above the line indicates that that the cluster is relatively specialized for the nation. Being to the right of the line means that the cluster is gaining share faster than what the nation is gaining (or losing) in share of global goods exports overall.

In terms of electricity generation Mozambique is considered a leader in its region. While Cahora Bassa hydroelectric power station in Mozambique is where most of the electricity is generated, the country is increasingly expanding its energy mix with gas- and coal-fired power stations under way. It is of great importance for Mozambique to put attention towards alternative sources of electricity, especially to avoid impact from climate change and thereby ensuring reliability of hydroelectric power generation. Mozambique is currently in a good exporting position already transferring electricity to South Africa and Zimbabwe, and it is also predicted that the establishment of a transfer line reaching Malawi will occur over a next 10-year period to 2021 (Business Monitor International, 2012). It is also estimated through a revised quarterly power report by BMI that the overall power generation in Mozambique will rise by an average of 18.9% yearly between the year 2013 and 2017.
Hydropower, in which the power sector relies heavily upon, is projected to be a major contributor to this increase.

Further, coal represents one of the most significant resources for the country and continues to expand and attract large investments. In 2011, the country experienced its first export of coal overseas, which made the country a first time world exporter of minerals (African Economic Outlook, 2012).

The percentage of the population with access to electricity in Mozambique has steadily increased during the last decade, but regardless of the country’s large quantity of energy resources this number has only reached about 23% in 2012 (see figure 42 below). Challenging areas that need to be dealt with include for instance improving domestic infrastructure and making energy access affordable to a greater number of people (Mulder and Tembe, 2009).

![Figure 43: Percentage of population with electricity access in Mozambique](image)

3.2.5 Hospitality and tourism cluster

The hospitality and tourism cluster in Mozambique had an export value of $198,557,000 in 2010, along with a world export share of 0.02%. The cluster had an average change in export share between 2000 and 2010 of 0.01%. A major challenge for this sector in Mozambique is competition from its neighboring countries, particularly South Africa, which represents a top tourist destination in the world today. About all countries bordering with Mozambique, except Malawi which has little tourism resources compared to Mozambique, are positioned in the top ten tourism destinations in Africa. This can be considered an asset in itself, but more importantly it demonstrates that Mozambique compared to its neighbors is not fully utilizing its tourism resources (Foreign Investment Advisory Service, 2006). In 2010, Mozambique had 1,718,000 visitors and Zimbabwe had 2,239,000 visitors, while South Africa had as much as 8,074,000 (World Bank, 2013). As a consequence, the hospitality and tourism sector of Mozambique has potential to grow and attract a larger number of tourists.
3.2.6 Transportation and logistics cluster

The transportation and logistics cluster in Mozambique had a world export share of 0.02% in 2010 and a negative average change in share from 2000 to 2010 of 0.01%.

Infrastructure

With reference to the Logistic Performance Index in 2010 Mozambique ranked only 2.04 out of 5 on the quality of trade and transport-related infrastructure (World Bank, 2012). The average for East Africa is 2.51. The number is based on the evaluation of the quality of for instance ports, railroads, roads, information technology and other related areas and indicates a relatively poor infrastructure in the country. However, according to a survey by Ernst and Young for 2013*, Mozambique is among the top ten destinations in Africa for investments in infrastructure projects. The survey also state that the majority of these projects are linked to transport (41%) and power (37%).

* A sample of 503 international decision-makers who are business leaders with considered views and experiences of Africa.

The Maputo Development Corridor

The Maputo Development Corridor is a transportation corridor made up of roads, rails, border posts, ports and terminal facilities, and the corridor links all these elements together (Maputo Development Corridor, 2013). According to the Commonwealth of Nations (2013), the transportation corridor is the most important link in Mozambique and it runs through some of the most industrialized and productive regions of Southern Africa (Maputo Development Corridor, 2013). The Maputo Corridor is in the process of expansion through investments from the governments of South Africa, Mozambique and Swaziland. These countries also aim to stimulate sustainable development and growth in the region through implementing policies that support investments in the private sector (The Commonwealth of Nations, 2013).

3.2.7 Oil and gas cluster

The oil and gas cluster in Mozambique had a 0.01% share of world exports in 2010 along with an average change in export share from 2000 to 2010 of 0.01%. This cluster is primarily made up by three sub-clusters, namely crude petroleum, petroleum processing and oil and gas machinery. Crude petroleum is the largest sub-cluster in terms of exports compared to the other two sub-clusters and had a world export share in 2010 of 0.01%. Additionally, the sub-cluster of crude petroleum had an average change in world export share in 2000 to 2010 of 0.01%.
The figure is a comprehensive graphic illustration of the different clusters in the country. It focuses on the various clusters’ world export share in 2010 (y-axis - can be interpreted as market shares, global export share for relevant cluster), the average change in the country’s share of export from the clusters in the period of 2000 to 2010 (x-axis) and the size of the clusters in terms of exports relative to other clusters in the country (size of the bubble). The figure also shows the country’s overall average of world export share in 2010 and the average change in the country’s share of exports from 2000 to 2010 through the dashed lines vertically and horizontally respectively. Being above the line indicates that that the cluster is relatively specialized for the nation. Being to the right of the line means that the cluster is gaining share faster than what the nation is gaining (or losing) in share of global goods exports overall.

According to the U.S Energy Information Administration, Mozambique is known to possess large onshore and offshore sedimentary basins with hydrocarbon resources. Already in 1948, international oil companies (IOCs) showed interest in Mozambique’s resources by initiating hydrocarbon exploration. At the moment, Mozambique has four proved gas fields (located onshore in the basin: Pande, Buzi, Temane and Inhassoro according to the Petroleum Institute of Mozambique). According to the Oil & Gas Journal, the total proven reserves of natural gas in Mozambique were reported to be about 4.5 trillion cubic feet (Tcf) as of January 2013.

In 2011, the Pande and Temane fields in Mozambique produced about 135 Bcf of dry natural gas. These two fields are both operated by the South African energy and chemicals company, Sasol. The majority of this gas (117 Bcf) was exported to South Africa and the rest (18 Bcf) was consumed domestically (U.S Energy Information Administration, 2013). The export to
South Africa is sent through the Sasol Petroleum International Gas Pipeline which is 535 miles long.

One of the most recent and largest discoveries in Mozambique was made in the field of offshore gas reserves (estimated at 150 trillion cubic feet), and this is known to represent one of the largest gas reserves in the world. However, the actual exploitation is not likely to occur before 2019 due to requirements of large investments in infrastructure (transportation) and production (African Economic Outlook, 2012).

### 3.2.8 Tobacco cluster

The tobacco cluster in Mozambique is the cluster that has experienced the largest average change in share of exports in the period from 2000 and 2010, an increase of 0.40%. The cluster had a world export share of 0.43% in 2010. The cluster of tobacco is made up by the sub-cluster cigarettes (see below in figure 45).
The figure is a comprehensive graphic illustration of the different clusters in the country. It focuses on the various clusters' world export share in 2010 (y-axis - can be interpreted as market shares, global export share for relevant cluster), the average change in the country's share of export from the clusters in the period of 2000 to 2010 (x-axis) and the size of the clusters in terms of exports relative to other clusters in the country (size of the bubble). The figure also shows the country's overall average of world export share in 2010 and the average change in the country's share of exports from 2000 to 2010 through the dashed lines vertically and horizontally respectively. Being above the line indicates that that the cluster is relatively specialized for the nation. Being to the right of the line means that the cluster is gaining share faster than what the nation is gaining (or losing) in share of global goods exports overall.
3.2.9 Fishing and fishing products cluster

The fishing and fishing products cluster had a world export share in 2010 of 0.06%, but experienced a decline in average export share from 2000 to 2010 of 0.14%. The sub-clusters of the fishing and fishing products are fishing and processed seafoods (see figure below). The sub-cluster of fishing is the largest in terms of exports in relative terms and had a world export share of 0.06% in 2010 and an negative average change in export share from 2000 to 2010 of 0.14%. The sub-cluster of processed seafoods had a world export share of 0.05% in 2010 and a negative average change in export share of 0.02% from 2000 to 2010.

Figure 46: Fishing and fishing products cluster in Mozambique

The figure is a comprehensive graphic illustration of the different clusters in the country. It focuses on the various clusters' world export share in 2010 (y-axis - can be interpreted as market shares, global export share for relevant cluster), the average change in the country’s share of export from the clusters in the period of 2000 to 2010 (x-axis) and the size of the clusters in terms of exports relative to other clusters in the country (size of the bubble). The figure also shows the country’s overall average of world export share in 2010 and the average change in the country’s share of exports from 2000 to 2010 through the dashed lines vertically and horizontally respectively. Being above the line indicates that the cluster is relatively specialized for the nation. Being to the right of the line means that the cluster is gaining share faster than what the nation is gaining (or losing) in share of global goods exports overall.
The fishing sector in Mozambique represents a significant source of food, revenue and employment, and can simultaneously be considered an area with a potential that has not yet been fully tapped (USAID, 2010). Mozambique has a unique location with a long coastline facing the Indian Ocean, which has been a major factor for this industry. A serious challenge for the industry has been the oil crisis starting in 2004 and peaking in 2008, along with the financial crisis. Fishing operators have recently been struggling with high operating costs, particularly after the rise in oil prices in 2008. About 50% of the Mozambique’s 59 industrial fishing vessels were forced to stop their operations due to the increase in oil prices. The financial crisis led to a decrease in the international demand for fisheries products. The international prices of shrimps, Mozambique’s major export good in seafood, have particularly been affected by this. Additionally, the sector is struggling with a lack of capital from private and public investments (USAID, 2010).

Aquaculture plays an important role in the fishing industry in Mozambique. To encourage aquaculture the Government has put a strong focus on this method and its importance for socioeconomic development and poverty reduction by appointing aquaculture as one of their top priorities (Ministry of Fisheries of Mozambique, 2011).

3.2.10 Services clusters in Mozambique

The largest services clusters in Mozambique by exports in relative terms include hospitality and tourism, transportation and logistics and business services. Other services clusters in the country are communication services, financial services and construction services. The hospitality and tourism is the largest services cluster in terms of exports, followed by transportation and logistics and business services. Construction services is the services cluster with the largest average change in export share from 2000 to 2010 of 0.03% compared to all the services clusters.
Figure 47: Services clusters only in Mozambique

The figure is a comprehensive graphic illustration of the different clusters in the country. It focuses on the various clusters' world export share in 2010 (y-axis - can be interpreted as market shares, global export share for relevant cluster), the average change in the country's share of export from the clusters in the period of 2000 to 2010 (x-axis) and the size of the clusters in terms of exports relative to other clusters in the country (size of the bubble). The figure also shows the country's overall average of world export share in 2010 and the average change in the country's share of exports from 2000 to 2010 through the dashed lines vertically and horizontally respectively. Being above the line indicates that that the cluster is relatively specialized for the nation. Being to the right of the line means that the cluster is gaining share faster than what the nation is gaining (or losing) in share of global goods exports overall.

3.2.11 Exports to world regions

Europe represents the largest export region of Mozambique followed by Sub-Saharan Africa and East Africa. In 2011, around 75% of the exports to the EU was aluminium, and the rest mainly consisted of agricultural and fishery products (sugar, nuts, vegetables and shrimps) (Delegation of the European Union to Mozambique, 2011). Under the European Union/SADC Economic Partnership Agreement, which was signed in 2009, Mozambique enjoys prefential access to markets in Europe (African Economic Outlook, 2012).

About 21% of Mozambique’s imports in 2011 came from the EU, the country’s second largest import partner after South Africa. Some of these imports included machinery and transport equipment, chemical products and food products (Delegation of the European Union to Mozambique, 2011).
3.2.12 The largest trade partners

Netherlands is by far the largest export partner of Mozambique. South Africa is also an important partner for Tanzania’s exports followed by China, India, Portugal, Spain and Zimbabwe. The export value to the Netherlands in 2010 amounted to $1.181, 9 million, and this represented a goods exports share of 26, 9% that same year. The average change in share of exports to the Netherlands from 2000 to 2010 was 26, 39%. The export value to South Africa was about $451, 5 million in 2010, and the goods exports share was 10, 28%. The average change in share of exports to South Africa from 2000 to 2010 was 2, 96%.
Exports from Mozambique to South Africa include a large amount of natural gas through a pipeline joining the two countries. This creates mutual benefits as Mozambique barely has a domestic market for natural gas, while South Africa has a staggering demand for natural gas on an annual basis (United Nations Africa Renewal, 2007).

3.2.13 Cluster development initiatives in Mozambique

The Innovation Systems & Clusters Programme (ISCP-EA) was established in 2004 with the aim of introducing local clustering initiatives to stimulate competitiveness with a focus on EAC. The university-led regional program has currently been implemented in Mozambique, Tanzania and Uganda. In Mozambique 8 clusters under development were identified in 2008 and these are listed in the table below (Cluster Initiatives East Africa, 2008).
Table 17: The cluster initiatives in Mozambique

<table>
<thead>
<tr>
<th>Cluster Initiatives</th>
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<tbody>
<tr>
<td>Cashew nuts</td>
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<tr>
<td>Small scale mining</td>
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<tr>
<td>Cassava</td>
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<tr>
<td>Beef farming</td>
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<tr>
<td>Medicine plants processing</td>
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<tr>
<td>Logistics</td>
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<tr>
<td>Solid waste recycling and composting</td>
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<tr>
<td>Tropical fruit processing</td>
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3.3 Clusters in Rwanda

Rwanda experienced a strong growth in GDP of about 7.7% in 2012, which was mainly driven by the service and industry sectors. This section of the report looks into the various clusters of Rwanda, and the figure below shows the largest clusters in Rwanda by exports in relative terms from 2003 to 2009. There were only two Norwegian firms in Rwanda in 2012, within oil and gas and maritime.
3.3.1 Hospitality and tourism cluster

The hospitality and tourism cluster in Rwanda is the largest cluster in terms of exports compared to the other clusters in the country. The cluster is located far up in the right corner of the figure above, which indicates a specialized cluster with a world export share of about 0.012% in 2009, and an average change in export share of around 0.008% from 2003 to 2009. Tourism is a significant sector of Rwanda representing the largest foreign exchange earner of the country in 2012. The sector earned about $281.8 million in 2012, which was about $30 million more than the year before (African Economic Outlook, 2013). The number of visitors amounted to 619,000 in 2010 (World Bank, 2013). The famous mountain gorillas...
located in Rwanda, Uganda and DRC has been of huge importance in order to attracting tourists for this country. Most of the tourism in the country is centered around the mountain Gorilla trekking.

3.3.2 Agricultural products cluster

The agricultural products cluster or the agribusiness cluster in Rwanda was the second largest cluster in the country in terms of exports in 2009. The cluster had a world export share of about 0, 011% in 2009 and an average change in export share of about 0, 0035% from 2003 to 2009.

Agriculture has a dominant role in the economy of Rwanda and is considered a main driver for sustainable growth (World Bank, 2011). Agriculture is the sector employing the majority of the population, accounting for about 73% (African Economic Outlook, 2013). Currently, agriculture represents the second largest contributor to GDP, about 36%. Until 2005, agriculture was the main GDP contributor of the country, but from that year the service sector has taken over (World Bank, 2013).

Coffee and tea has had the highest growth and investment rate, and Rwanda is considered to be the largest producer of tea in East Africa, after Kenya.

3.3.3 Metal, mining and manufacturing cluster

The metal, mining and manufacturing cluster in Rwanda was among the four largest clusters in the country in terms of exports in 2009. The cluster had a world export share of 0, 007% in 2009 and an average change in export share of almost 0, 005% from 2003 to 2009.

The mining sector in Rwanda has not historically made a strong contribution to the country’s GDP, but in 2007 the National Bank of Rwanda reported that activities in the sector of mining increased by 38, 9% (Commonwealth of Nations, 2013). The prime mineral export in Rwanda is ores, which is processed to extract tin, coltan and tungsten. According to the Rwanda Development Board (2013), the sector has strong potential for growth as only about a quarter of potential output has for the moment been exploited. In addition, considerable opportunities exist in relation to increasing productivity through industrial mining.

According to the National Bank of Rwanda, the mining sector generated about $49 million in revenues between January and September 2007. The most profitable mineral was represented by cassiterite, which is a vital element in electronic components (Mining Review, 2008). Additionally, prior to the war and genocide in 1994, Rwanda’s production of cassiterite accounted for about 3% of world production. Between 2001 and 2004, a sharp increase in demand for this mineral could be detected, primarily due to the boom in telecom and computer electronics in this period that also led to an increase in the demand and market price (Mining Review, 2008).

3.3.4 Transportation and logistics cluster

The transportation and logistics cluster in Rwanda was also among the four largest clusters in the country in terms of exports in 2009. The cluster had a world export share of almost 0,
0.01% in 2009 and an average change in export share between 2003 and 2009 of about 0.0035%.

Rwanda’s main transport system consists of a road network in excess of 14,000 km. This network is the connecting link between Kigali and the major cities and towns located in the provinces of the EAC countries, which are the areas where the majority of Rwanda’s imports are generated. There is currently no rail network in Rwanda, but plans by the Government are in motion with the aim of building a railway connecting Rwanda to the Tanzanian port of Dar es Salaam, which can offer a direct linkage to international transportation routes (Commonwealth of Nations, 2009)

3.3.5 The services sector

The service and industry sectors of Rwanda represent some of the main drivers of growth in relation to GDP in 2012 (African Economic Outlook, 2013). According to the same source services accounted for 46% of GDP in 2012, and experienced a growth of 13.7%, while industry grew by 5.9% in 2012.

3.3.6 Main export partners

The main export partners of Rwanda include China, Germany and the U.S, and the majority of the exports from Rwanda consist of traditional products such as coffee, tea and minerals such as tin, coltan, wolfram and cassiterite (Trading Economics, 2013).

According to the International Growth Center (2012), the export sector of Rwanda is considered fully recovered from the dramatic impact of the genocide in 1994. The sector has enjoyed a rise from 5% of GDP in 1994 to an average of around 12% since 2004, and the performance of the service sector is the main contributor to this recovery.

Minerals, coffee and tea combined represent around 88% of Rwanda’s exports. The figure below shows the destinations by regions of Rwanda’s main exports in 2010. As can be seen from the graph, exports of tea, coffee and minerals are mainly directed towards Europe, American and Asia.
There has been a large increase in the number of firms exporting in Rwanda. A potential driver for this rise is considered to be the entrance into the East African Community’s Customs Union in 2007, as well as the EAC Common Market in 2010. This resulted in an improved system for exports as tariff and non-tariff barriers to trade within the region were gradually removed, which again seemed to increase the number of companies exporting to other countries in the region such as Burundi, Uganda, Tanzania and Kenya (International Growth Center, 2012). In 2006, right before the country entered into the EAC Customs Union, Rwanda had about 66 firms exporting to the EAC region. In 2008, right after the entrance to the EAC, the number of firms had increased to 204, representing a growth of about 200% (see figure below).
Lastly, the imports of Rwanda include primarily food products, machinery and equipment, construction materials, petroleum products and fertilizers (Trading Economics, 2013).

3.4 Clusters in Kenya

In 2009, The National Economic and Social Council (NESC, 2013) recommended the adoption of a cluster development strategy in Kenya. This initiative was implemented to enhance regional and national competitiveness, which is a goal of Kenya’s Vision 2030. The following sectors were recommended for the introduction of a cluster development strategy: transport and logistics at the port of Mombasa, horticulture, sugar, tea, tourism, marine and inland fisheries, livestock, energy, ICT, maize, cotton and dairy.

The Kenya Institute of Public Policy and Research Analysis (KIPPRA) was involved to identify smaller numbers of clusters. The study included other organizations as well, and the following six clusters were included for initial development:
- Transport and Logistics at Port of Mombasa
- Coast Beach Tourism
- Beef in Garissa
- ICT in Nairobi
- Inland Fisheries in Kisumu
- Horticulture in Naivasha-Limuru

3.4.1 Exports by cluster

The chart below is a comprehensive display of the different clusters in Kenya with bars indicating the US dollar value of a nation's goods exports across clusters using the most recent year available. The number appearing after each bar indicates the nation's rank among all reporting nations for goods exports in the cluster.
Figure 53: Exports by cluster (value of a nation’s goods exports in $ the most recent year available)

Figure shows the value of goods exported from the largest clusters (based on the most recent year available). The number next to the bar indicates the rank of the country among all reporting countries for exported goods in the cluster.

Source: BI Norwegian Business School Design
3.4.2 Export portfolio by cluster

The cluster of agricultural products represents the backbone of Kenya’s economy, with an export value of $2.580.277.000 in 2010. Agriculture contributes to approximately 30% of GDP in Kenya and accounts for about 80% of national employment, primarily in rural areas (Finpro, 2010). The cluster of transportation and logistics is Kenya’s second largest cluster in terms of exports, and had the second largest average change in export share in Kenya from 2000 to 2010. See figure 54 and 55.

Figure 54: Exports portfolio by cluster for Kenya

The figure is a comprehensive graphic illustration of the different clusters in the country. It focuses on the various clusters’ world export share in 2010 (y-axis - can be interpreted as market shares, global export share for relevant cluster), the average change in the country’s share of export from the clusters in the period of 2000 to 2010 (x-axis) and the size of the clusters in terms of exports relative to other clusters in the country (size of the bubble). The figure also shows the country’s overall average of world export share in 2010 and the average change in the country’s share of exports from 2000 to 2010 through the dashed lines vertically and horizontally respectively. Being above the line indicates that the cluster is relatively specialized for the nation. Being to the right of the line means that the cluster is gaining share faster than what the nation is gaining (or losing) in share of global goods exports overall.
Figure 55: Services Cluster excluded

The figure is a comprehensive graphic illustration of the different clusters in the country. It focuses on the various clusters’ world export share in 2010 (y-axis - can be interpreted as market shares, global export share for relevant cluster), the average change in the country’s share of export from the clusters in the period of 2000 to 2010 (x-axis) and the size of the clusters in terms of exports relative to other clusters in the country (size of the bubble). The figure also shows the country’s overall average of world export share in 2010 and the average change in the country’s share of exports from 2000 to 2010 through the dashed lines vertically and horizontally respectively. Being above the line indicates that the cluster is relatively specialized for the nation. Being to the right of the line means that the cluster is gaining share faster than what the nation is gaining (or losing) in share of global goods exports overall.

3.4.3 Tobacco cluster

Kenya’s world export market share of tobacco in 2010 amounted to 0.41%. In terms of the world market share contribution this cluster performs well in Kenya (located highest on the y-axis). The cluster experienced the highest positive average change in world export share in Kenya between 2000 and 2010 of 0.27%.

3.4.4 Sub-cluster – Cigarettes

The tobacco cluster is composed of only one sub-cluster, namely cigarettes.
Figure 56: Kenya’s Tobacco Cluster

The figure is a comprehensive graphic illustration of the different clusters in the country. It focuses on the various clusters’ world export share in 2010 (y-axis - can be interpreted as market shares, global export share for relevant cluster), the average change in the country’s share of export from the clusters in the period of 2000 to 2010 (x-axis) and the size of the clusters in terms of exports relative to other clusters in the country (size of the bubble). The figure also shows the country’s overall average of world export share in 2010 and the average change in the country’s share of exports from 2000 to 2010 through the dashed lines vertically and horizontally respectively. Being above the line indicates that the cluster is relatively specialized for the nation. Being to the right of the line means that the cluster is gaining share faster than what the nation is gaining (or losing) in share of global goods exports overall.

3.4.5 Agricultural products cluster

The cluster of agricultural products consists of miscellaneous vegetable materials, oils and fats, vegetables and fruits, plants and flowers, coffee, tea, cocoa and spices. From the figure below the highest growth can be found in the sub-cluster of miscellaneous vegetable materials with a positive average change in export share of 12, 55% between 2000 and 2010.

The sub-cluster of coffee, tea, cocoa and spices had the largest export value of all the sub-clusters in 2010 amounting to $1.382.499.000, yet it only held a world export share of 2,32% in 2010, which is less than for instance the sub-cluster of miscellaneous vegetable materials with 14,99% of world export share that same year. The sub-cluster of coffee, tea,
cocoa and spices also experienced the largest negative average change in export share from 2000 to 2010 of 0.65% compared to the other sub-clusters.

The plants and flowers sub-cluster had a world market share of 2.58% in 2010 and is the second largest foreign exchange earner for Kenya after the sub-cluster of coffee, tea, cocoa and spices with a value of $454,540,000 in 2010.

The vegetable and fruits sub-cluster had a small world export share in 2010 of 0.26%, along with a negative average change in export share from 2000 to 2010 of 0.01%.

**Figure 57: Kenya’s Agricultural Products Cluster**

The figure is a comprehensive graphic illustration of the different clusters in the country. It focuses on the various clusters' world export share in 2010 (y-axis - can be interpreted as market shares, global export share for relevant cluster), the average change in the country's share of export from the clusters in the period of 2000 to 2010 (x-axis) and the size of the clusters in terms of exports relative to other clusters in the country (size of the bubble). The figure also shows the country's overall average of world export share in 2010 and the average change in the country's share of exports from 2000 to 2010 through the dashed lines vertically and horizontally respectively. Being above the line indicates that that the cluster is relatively specialized for the nation. Being to the right of the line means that the cluster is gaining share faster than what the nation is gaining (or losing) in share of global goods exports overall.
3.4.6 Sub-cluster - Miscellaneous vegetable materials

Kenya is the number one exporter of miscellaneous vegetable materials worldwide with a world market share of 14.99% and an export value of $60,130,000 in 2010.

3.4.7 Sub-cluster - Plants and flowers

The Netherlands is the largest flower exporter worldwide. In Africa, Kenya leads the production and export of flowers, gradually followed by Ethiopia. In recent years, both Kenya and Ethiopia has experienced a fast growth in the cut flower industry (BTC Trade for Development, 2010). Kenya is the 7th largest exporter of plants and flowers worldwide with an export value of $454,540,000 in 2010. It primarily exports roses (74%) and summer flowers to the Netherlands, Germany and the U.K. Kenya, despite the rising competition from Netherlands, Columbia, Belgium, Italy, Germany and Ecuador, has seen exceptional growth in this sub-cluster with a 35% annual growth rate of cut flowers in volume, from 39,000 tons in 2000 to 81,217 tons in 2005. In addition, the value of flower exports increased from $81,5 mill in 2000 to $265,58 mill in 2005 employing 50,000-70,000 people directly and more than 1,5 mill indirectly (Embassy of the Republic of Kenya in Japan, 2012).

The main production areas are located around Lake Naivasha, Mt. Kenya, Nairobi, Thika, Kiambu, Athi River, Kitale, Nakuru, Kericho, Nyandarua, Trans Nzoia, Uasin Gichu and Eastern Kenya (Kenya Flower Council 2012).

Kenya’s competitive advantage originates from its climate, low labor costs, control of environmental regulations and low trade barriers. The geographic location of Kenya allows for a great variety of climatic conditions from the hot coastal plain up to the cool highlands. Daytime temperatures are from 22 °C - 30 °C and night time from 6 °C - 12 °C. Rain days are limited to 60 - 80 days so the conditions are ideal all year-round for the growing of quality flowers without the necessity of greenhouses (Embassy of the Republic of Kenya in Japan, 2012).

Less stringent environmental regulations that initially could be perceived as an advantage for Kenya became a challenge for this sub-cluster in the 1990’s. Kenya, a region with lower standards of working conditions and its environmental impacts, had to meet the standards of supermarket channels and the auction channel with regards to use of chemicals, labor and water (BTC Trade for Development, 2010). Therefore in 1996, the Kenya Flower Council (KFC) was established as a voluntary association of independent growers and exporters of cut flowers and ornamentals, aiming at fostering responsible and safe production of cut flowers in Kenya (Kenya Flower Council).

3.4.8 Sub-cluster - Coffee, tea, cocoa and spices

The sub-cluster of coffee, tea, cocoa and spices is the largest foreign exchange earner for Kenya with an export value of $1,382,499,000 in 2010. Kenya is the largest producer of tea in Africa, exporting to 54 countries, and the most important markets are Egypt, Pakistan, Afghanistan and Sudan. Opportunities are present through new emerging markets such as Europe, Russia and Bangladesh. Other prospects involve investment in tea plantations, value
addition in processing and packaging tea for export as well as micro financing for smallholder farms (Brand Kenya, 2012).

Kenya is also the largest exporter of premium Arabic coffee on a global scale. Their major trading partners in this sector include Germany, USA, Canada, Sweden, Finland, UK and Saudi Arabia.

The negative average change in export share of 0.65% between 2000 and 2010 (from the figure above) could be explained by some of the challenges that this sub-cluster has been facing such as unexpected climate changes, high level of dependency on a few key export markets, limited value addition and high costs of production (Business Daily, 2010; Kagira, Kimani and Githii, 2012).

Climate change undeniably had an impact on Kenyan coffee production. The unforeseeable and sporadic rainfall and extreme droughts has contributed to tough management of crop and disease control. The rainfall in the 2007/08-crop year was a reason for a serious attack of the Coffee Berry Disease, cutting Kenyan output by 23% as farmers were unexpectedly caught in the rains and did not manage to protect their crops in time (Business Daily, 2010).

The overdependence on key customers contributed to Kenya’s drop in export of tea in 2009, when Pakistan, which was purchasing 23% of Kenya’s total tea export (EPZA, 2005), decided to reduce the imports of tea from Kenya in 2008, causing Kenya’s export to shrink (Business Daily, 2008; Kagira, Kimani & Githii, 2012; Chan et al. 2009).

3.4.9 Transportation and logistics cluster

The transportation and logistics cluster is the second largest in terms of export value in Kenya, after the agricultural products cluster. This cluster contributed to Kenya’s exports with $1,562,553.000 in 2010. Additionally, the cluster had a world market share of 0.23% in 2010 and an average change of export share of 0.11% between 2000 and 2010.

Kenya plays a role as an international hub where its largest strength can be found in air transport. Kenya is a regional leader with Kenya Airways being among the top 3 international carriers in Africa. They are considered to have high safety records and extensive networks. Kenya has a domestic transport market that is the fourth largest in Sub-Saharan Africa, after South Africa, Nigeria and Mozambique (Brand Kenya, 2012). Kenya is considered to be a leading transportation hub in East Africa.

Kenya’s 5th rank in “The top 10 African destination countries for the number of infrastructure projects” (Ernst and Young, 2013) indicates important changes and opportunities in this sector, which opens a great potential for the country’s economic growth.

Moreover, Kenya has received support and involvement from the World Bank through the initiation of a Transport Sector Support Project aimed to “increase the efficiency of road transport along the Northern Corridor and the Tanzania-Kenya-Sudan road corridor; enhance aviation safety and security to meet international standards; and improve the institutional arrangements and capacity in the transport sector” (World Bank, 2013).
However, Kenya’s transportation has suffered from lack of investments and low productivity for their ports and decade railways operations.

### 3.4.10 Hospitality and tourism cluster

The cluster of hospitality and tourism is the third largest cluster in terms of export value in Kenya. In 2010, the cluster had an export value of $802,035,000. The cluster had a world export share of 0.09% in 2010 and an average change in export share of 0.03% between 2000 and 2010.

The Kenyan government highlights the importance of tourism in the “Vision 2030”. This project involves the diversification and development of tourism products such as sports tourism, cruise tourism and bird watching to increase attractiveness and improvements of resort cities like Isiolo, Diani and Kilifi, ultimately to increase standards and bring higher economic class tourists. The development of this cluster can contribute to job creations and preservation of historical sights (Kenya, Vision, 2030).

Kenya’s largest competitor in the hospitality and tourism industry is Tanzania. Both of the countries offer similar tourist attraction in the region. Yet, Kenya attracts a significantly higher number of visitors than Tanzania. Kenya was able to attract 1,392,000 and 1,470,00 visitors in 2009 and 2010 respectively, while Tanzania was lagging behind with 695,000 and 754,000 in 2009 and 2010 respectively (World Bank, 2010).

Even though Kenya is outperforming its local competitors in this cluster, it also faces some challenges, particularly related to safety. Kenya ranks 19 (out of 195 where 1 is the poorest ranking) in relation to political instability (indicating a very high risk for social unrest), while Tanzania ranks 89 in in the period of 2009/10 (The Economist Intelligence Unit, 2013). In addition, the situation in neighboring country Somalia might also have a negative effect on the perception of Kenya.

### Services clusters in Kenya

The figure below shows the services clusters excluded in Kenya. The largest services cluster in terms of exports (in relative terms) is the transportation and logistics cluster followed by hospitality and tourism, communication services and financial services. The transportation and logistics cluster is also the cluster that has experienced the largest average change in export share from 2000 to 2010. Kenya has the most sophisticated ICT infrastructure in the region favoring both the financial service industry and communication services. Kenya also has the highest percentage of Internet users and mobile phone subscribers in East Africa.
3.4.11 Oil and gas products cluster

The oil and gas products cluster ranks 8th in terms of export value for Kenya and had an export value of $220,028,000 in 2010. The cluster had a world export share of 0.01% in 2010 and a negative average change in export share of 0.01% between 2000 and 2010.

According to Deloitte (2013) Kenya possesses four sedimentary basins with potential: Anza, Lamu, Mandera and the Tertiary Rift. Recent discoveries made in 2012 in areas such as the Tertiary Rift has led to the entry of major foreign oil companies. This can cause important changes to this cluster in the future when Kenya starts oil production, which according to the IMF is estimated to happen in about 6 to 7 years from now (Business Daily, 2013).
Today the cluster is primarily made up by the sub-cluster of petroleum processing with an export value of $211,974,000 in 2010. The cluster also consists of smaller sub-clusters (in terms of exports) such as hydrocarbons ($5,337,000), oil and gas machinery ($2,582,000) and crude petroleum ($135,000).

Figure 59: Kenya’s Oil and Gas Products Cluster

The figure is a comprehensive graphic illustration of the different clusters in the country. It focuses on the various clusters’ world export share in 2010 (y-axis - can be interpreted as market shares, global export share for relevant cluster), the average change in the country’s share of export from the clusters in the period of 2000 to 2010 (x-axis) and the size of the clusters in terms of exports relative to other clusters in the country (size of the bubble). The figure also shows the country’s overall average of world export share in 2010 and the average change in the country’s share of exports from 2000 to 2010 through the dashed lines vertically and horizontally respectively. Being above the line indicates that the cluster is relatively specialized for the nation. Being to the right of the line means that the cluster is gaining share faster than what the nation is gaining (or losing) in share of global goods exports overall.

3.4.12 Leading trade partners

Some of the predominate export partners of Kenya are Uganda, United Kingdom, Tanzania and the Netherlands. In 2010, 6, 36% of Kenyan goods were exported to Uganda with an export value of $657.29 million; 4, 91% to United Kingdom with an export value of $507.21 million; 4, 06% to Tanzania with an export value of $420.21 million and 4, 28% to the Netherlands with an export value of $338.91 million in 2010. Among the leading partners
mentioned above, Uganda and United Kingdom contributed to the highest export value of $657.29 million and $507.21 million in 2010 respectively. However, these two countries also experienced a negative change in share of exports between 2000 and 2010. In fact, United Kingdom encountered the highest decline in share export of all Kenya’s trading partners, equivalent to -2.86% from 2000 to 2010.

**Figure 60: Goods Exports Share to Leading Trade Partners**

**Kenya**

**Goods Exports Share to Leading Trade Partners, 2000 - 2010**

![Diagram of Goods Exports Share to Leading Trade Partners, 2000 - 2010](image)

![Source: Bi Norwegian Business School Design](image)


### 3.4.13 Export share to world regions

Sub-Saharan Africa has become an increasingly important trading region for Kenya during recent years. From the last figure we could see that African and East African countries are becoming increasingly important markets. Two substantial world regions for Kenya’s exports are Sub-Saharan Africa and Europe. The noteworthy development with neighbouring regions can be seen in the figure below with a 4.23% increase in the share of exports to Africa and Sub-Saharan Africa between 2000 and 2010, with 20.83% of Kenya’s goods being exported to this region. As opposed to the decline in share of export of 4.6% to Europe where 13% of Kenyans goods where exported in 2010.
3.5 Clusters in Uganda

The Innovation Systems & Clusters Programme Uganda (ISCP/PACF-U), a University-managed program coordinated by the Directorate of Graduate Research and Training (DGRT) of Makerere University, has contributed to the formation of cluster initiatives in Uganda. The purpose of the program is to improve the competitiveness of Uganda’s businesses locally and globally through innovation systems and innovative cluster initiatives. These initiatives attract needed financial support from the banks that allows for further development. In 2013, the World Bank approved the International Development Association (IDA) credit for Competitiveness and Enterprise Development Project (CEDP), with a worth of $100 million to increase the competitiveness of initiatives in Uganda. The project aims to provide support for the implementation of business environment reforms (World Bank, 2013).

The purpose of the Innovation Systems and Clusters Program Uganda is not only to create cluster initiatives, but also to create a connection between geographically spread clusters in various industries, with the aim of creating national innovation systems in a given industrial sector to stimulate competitiveness with a focus on the EAC countries. The program has faced a substantial growth over its 9-year period of existence since 2004, with the expansion
of the number of clusters initiated and regional support (programs are now also carried out in Mozambique and Tanzania). The program has encouraged a 51% increase in the number of clusters from 7 initial pilot clusters in 2005 to 58 cluster initiatives and 5 innovation systems that are running at the moment (ISCP/PACF-Uganda, 2013).

Below is a list from 2008 portraying the initial 22 clusters initiatives under development that has received considerable attention from the Government.

**Table 19: Cluster Development Initiatives**

<table>
<thead>
<tr>
<th>Cluster Initiative</th>
<th>Cluster Initiative</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Management consultancy, Kampala</td>
<td>12 Coffee</td>
</tr>
<tr>
<td>2 Salt processing, Western Uganda</td>
<td>13 Building materials, Kampala</td>
</tr>
<tr>
<td>3 Metal fabrication, Kampala</td>
<td>14 Furniture, Natete-Kampala</td>
</tr>
<tr>
<td>4 Pineapple processing, Kayunga</td>
<td>15 ICT Software, Kampala</td>
</tr>
<tr>
<td>5 Basketry, Luwero</td>
<td>16 Leather processing, Jinja</td>
</tr>
<tr>
<td>6 Fashion design/textiles, Kampala</td>
<td>17 Maize millers, Jinja</td>
</tr>
<tr>
<td>7 Bio-fuel-Ethanol, Kakira</td>
<td>18 Education, Kampala</td>
</tr>
<tr>
<td>8 Fruit and vegetable processing, Luwero</td>
<td>19 Tree planting, Masaka</td>
</tr>
<tr>
<td>9 Bee-keeping, Lira</td>
<td>20 Fish farming, Kaliro</td>
</tr>
<tr>
<td>10 Dairy, South Eastern Uganda</td>
<td>21 Goat rearing, Soroti</td>
</tr>
<tr>
<td>11 Mushroom</td>
<td>22 Vegetable seeds, Kampala</td>
</tr>
</tbody>
</table>

*Source: Cluster Initiatives East Africa (2008)*
3.5.1 Export portfolio by cluster

The figure below shows the national cluster export portfolio for Uganda from 2000 to 2010. The hospitality and tourism cluster is the largest cluster in relative terms in Uganda followed by agricultural products. The agricultural products cluster is large, but has experienced no change in export share from 2000 to 2010. The fishing and fishing products cluster is also among the top five largest clusters in Uganda with a world export share of 0.13% in 2010 and an average change in export share of 0.07% from 2000 to 2010. The tobacco cluster is located in a favorable position in the figure far up in the right corner indicating a specialized cluster. It had an average change in world share from 2000 to 2010 of 0.07% and a world export share in 2010 of 0.20%.

Figure 62: Export Portfolio by Cluster for Uganda

The figure is a comprehensive graphic illustration of the different clusters in the country. It focuses on the various clusters’ world export share in 2010 (y-axis - can be interpreted as market shares, global export share for relevant cluster), the average change in the country’s share of export from the clusters in the period of 2000 to 2010 (x-axis) and the size of the clusters in terms of exports relative to other clusters in the country (size of the bubble). The figure also shows the country’s overall average of world export share in 2010 and the average change in the country’s share of exports from 2000 to 2010 through the dashed lines vertically and horizontally respectively. Being above the line indicates that that the cluster is relatively specialized for the nation. Being to the right of the line means that the cluster is gaining share faster than what the nation is gaining (or losing) in share of global goods exports overall.
Figure 63: Exports by cluster (value of a nation’s goods exports in $ (the most recent year available))

The figure shows the value of goods exported from the largest clusters (based on the most recent year available). The number next to the bar indicates the rank of the country among all reporting countries for exported goods in the cluster.

Source: BI Norwegian Business School Design
3.5.2 Services clusters excluded

The figure below shows the clusters in Uganda with the exception of services clusters. When the services clusters in Uganda are excluded the agricultural products cluster is by far the largest cluster in terms of exports (in relative terms) in Uganda. The fishing and fishing products clusters, the metal mining and manufacturing cluster, the construction materials cluster and the tobacco cluster are also all among the top five largest clusters in terms of exports in Uganda.

Figure 64: Services clusters excluded for Uganda

The figure is a comprehensive graphic illustration of the different clusters in the country. It focuses on the various clusters’ world export share in 2010 (y-axis - can be interpreted as market shares, global export share for relevant cluster), the average change in the country’s share of export from the clusters in the period of 2000 to 2010 (x-axis) and the size of the clusters in terms of exports relative to other clusters in the country (size of the bubble). The figure also shows the country’s overall average of world export share in 2010 and the average change in the country’s share of exports from 2000 to 2010 through the dashed lines vertically and horizontally respectively. Being above the line indicates that that the cluster is relatively specialized for the nation. Being to the right of the line means that the cluster is gaining share faster than what the nation is gaining (or losing) in share of global goods exports overall.
3.5.3 Tobacco cluster

The tobacco cluster in Uganda consists of the sub-cluster cigarettes. The cluster is relatively specialized in Uganda (as the circle is located far up in the right corner) with a world export share of about 0.20% in 2010 and an average change in export share from 2000 to 2010 of 0.07%.

Figure 65: Uganda’s Tobacco Cluster

The figure is a comprehensive graphic illustration of the different clusters in the country. It focuses on the various clusters’ world export share in 2010 (y-axis - can be interpreted as market shares, global export share for relevant cluster), the average change in the country’s share of export from the clusters in the period of 2000 to 2010 (x-axis) and the size of the clusters in terms of exports relative to other clusters in the country (size of the bubble). The figure also shows the country’s overall average of world export share in 2010 and the average change in the country’s share of exports from 2000 to 2010 through the dashed lines vertically and horizontally respectively. Being above the line indicates that that the cluster is relatively specialized for the nation. Being to the right of the line means that the cluster is gaining share faster than what the nation is gaining (or losing) in share of global goods exports overall.

3.5.4 Hospitality and tourism cluster

The hospitality and tourism cluster is by far the largest cluster in terms of exports in Uganda, with an export value of $729,867,000 in 2010.

Tourism in Uganda is focused on Uganda's landscape and wildlife. Uganda has a very diverse culture, landscape, flora, and fauna (Uganda Tours Operators and Trade, 2013).
Since 2000, the number of tourists has been progressively increasing and amounting to 946,000 in 2010 and 1,151,000 in 2011. Although the numbers are not as high as for Kenya with 1,470,000 visitors in 2010, they are larger than competitor tourist destination, Tanzania, which only attracted about 754,000 in 2010 (World Bank, 2010). Uganda was considered the number one tourist destination in 2012 by the Lonely Planet, the largest travel guide book publisher in the world. Additionally, Virunga volcanoes, one of e few places in the world that remains a sanctuary for the mountain gorillas, were chosen as “A must see place for 2012” amongst 12 tourist destinations that a person should visit in their lifetime (Ministry of Tourism, Wildlife and Antiquities, Republic of Uganda, 2013). The cluster had a world market share of 0.08% in 2010 and an average change in share of export from 2000 to 2010 of 0.05%.

3.5.5 Agricultural products cluster

The cluster of agriculture products in Uganda had a world export share of 0.07% in 2010 and an average change in exports share from 2000 to 2010 of zero, meaning that the cluster experienced no average growth or decline during this period. The cluster is made up by several different sub-clusters as can be seen from the figure below.
The sub-cluster of coffee, tea, cocoa and spices had a world export share of 0.66% in 2010, followed by the plants and flowers sub-cluster with 0.26% and oils and fats with 0.04%. From these three sub-clusters, the only noteworthy growth can be seen in the sub-cluster for plants and flowers which experienced an average change in export share from 2000 to 2010 of 0.15%. The sub-cluster had an export value of $46.561.000 in 2010. The coffee, tea, cocoa and spices sub-cluster has contributed to the highest export value in this cluster amounting to $394.222.000 in 2010, but the sub-cluster is also the only sub-cluster that faced a 0.13% decline in the average change in export share from 2000 to 2010. The sub-cluster of oil and fats had an export value of $58.360.000 in 2010, a world export share of 0.04% in 2010 along with an average change in export share of 0.04% between 2000 and 2010.
The sector of agriculture in Uganda accounted for almost 46% of total exports making it the most important export sector of the country in 2010. About 70% of the country’s workforce is employed in agriculture, and the production mainly consists of smallholder farms with operations on less than two hectares. The sector is struggling with barriers to increase production and productivity. Some of the barriers include lack of available medium and long-term finance, high interest rates and limited access to relevant market information (Ministry of Foreign Affairs of Denmark, 2010).

3.5.6 Fishing and fishing products cluster

The fishing and fishing products cluster in Uganda had a world export share of 0.12% in 2010. However, the 0.12% world market share in this cluster is very small in absolute terms. China is a world leader with 13.41% of world market share in this cluster, followed by the second largest exporter of fish, Norway, with 7.97% of the world’s market share. The third place in terms of share of exports in this cluster belongs to Thailand with 7.13%.
The figure is a comprehensive graphic illustration of the different clusters in the country. It focuses on the various clusters' world export share in 2010 (y-axis - can be interpreted as market shares, global export share for relevant cluster), the average change in the country's share of export from the clusters in the period of 2000 to 2010 (x-axis) and the size of the clusters in terms of exports relative to other clusters in the country (size of the bubble). The figure also shows the country's overall average of world export share in 2010 and the average change in the country's share of exports from 2000 to 2010 through the dashed lines vertically and horizontally respectively. Being above the line indicates that that the cluster is relatively specialized for the nation. Being to the right of the line means that the cluster is gaining share faster than what the nation is gaining (or losing) in share of global goods exports overall.

3.5.7 Sub-cluster - Fishing

The traditional way of harvesting a wild fish, also known as commercial fishing, is declining. Aquaculture or aqua farming is an increasingly popular alternative way of sourcing a fish, which includes cultivating freshwater and saltwater populations under controlled conditions. The production of aquaculture has increased dramatically during the last two decades. In 2009, aquaculture accounted for over 36% of total fish production in the world. The fishing sub-cluster in Uganda had an export value of $112,479,000 in 2010, and experienced an average change in export share from 2000 to 2010 of 0.06% and a world market share of 0.12% in 2010.
3.5.8 Sub-cluster – Processed Seafood

The sub-cluster of processed seafood had a world export share of 0.35% in 2010, compared to the sub-cluster of fishing with 0.12%. The processed seafood sub-cluster had an export value of $16,488,000 in 2010.

The processed seafood sub-cluster is concerned with activities and facilities that turn export quality fish into fillets. This industry like many others is labor-intensive. The process of turning fish into fillets includes sorting, washing, grading and separating the skeletons from the fish. Over 90% of Ugandan fish exports are fillets (International Trade Centre, 2010). Uganda has 15 major facilities that process seafood. They are located in Kampala, Masaka, Entebbe, and Jinja, all close to lakes. Some of the firms have invested in refrigerated trucks to transport raw material and store them in coolers located at the processing facilities. Fish of lower quality that does not meet the export standard are sold in local markets in a fresh, dry or salted form. Uganda’s seafood processing sector runs only at a 31% of total fixed capacity (HBS, 2010).

3.5.9 Services clusters only in Uganda

The figure below shows only the services clusters in Uganda, and the largest is by far the hospitality and tourism cluster. Other services clusters in Uganda include business services, communications services, financial services and transportation and logistics.
The figure is a comprehensive graphic illustration of the different clusters in the country. It focuses on the various clusters' world export share in 2010 (y-axis - can be interpreted as market shares, global export share for relevant cluster), the average change in the country’s share of export from the clusters in the period of 2000 to 2010 (x-axis) and the size of the clusters in terms of exports relative to other clusters in the country (size of the bubble). The figure also shows the country’s overall average of world export share in 2010 and the average change in the country’s share of exports from 2000 to 2010 through the dashed lines vertically and horizontally respectively. Being above the line indicates that that the cluster is relatively specialized for the nation. Being to the right of the line means that the cluster is gaining share faster than what the nation is gaining (or losing) in share of global goods exports overall.

3.5.10 Leading trade partners

The figure below shows the leading trade partners of Uganda in terms of goods exports share. The predominate export partners of Uganda are Kenya with an export share of 7, 12%, followed by Rwanda with 5, 26%, Sudan with 5% and Democratic Republic of the Congo with 4, 34%. In 2010, Uganda’s goods exported to Kenya amounted to $164.11 million, and to Rwanda it amounted to $121, 06 million. Goods exported to Sudan amounted to $115.13 million, and to Dem. Rep. of the Congo amounted to $100.23 million. Although Kenya was the most important partner in terms of volume and value exported from Uganda in 2010, it is the only leading partner that faced a negative change in share of exports of 0, 98% between 2000 and 2010.
3.5.11 Export share to world regions

The figure below shows Uganda’s goods exports share to world regions. Uganda is the only country within the EAC and Mozambique that exports such high volumes of its goods and services within the region of Sub-Saharan Africa. Uganda’s main partners are Kenya, Rwanda and Sudan. The total export share of Uganda’s goods exported to Sub-Saharan African amounted to 25, 26% in 2010, with a large average change in share of exports to this region of 10, 86% between 2000 and 2010. The export share to Europe accounted for 18, 38% with a negative share change of 8, 71% from 2000 to 2010. The numbers below suggests high interdependence between countries in Sub-Saharan Africa, which is an important condition for future growth, cooperation and development in this region.
Figure 70: Goods Export Share to World Regions

Uganda
Goods Exports Share to World Regions, 2000 - 2010

Source: BI Norwegian Business School Design
4. Concluding remarks – potential future drivers and trends for the EAC and Mozambique

During the last decade, the EAC has been one of the fastest growing regions in the world, and each country individually has more than doubled its GDP during the same period.

In the EAC and Mozambique region, Kenya is the largest economy in terms of GDP followed by Tanzania, Uganda, Mozambique, Rwanda and Burundi. Kenya is also the country that has enjoyed the largest increase in overall GDP between 2003 and 2011. However, Mozambique, Rwanda and Uganda had higher annual GDP growth per capita than Kenya in the same period, albeit from a lower base. Burundi had the lowest annual GDP growth rate per capita during this period. All of the countries are among the poorest of the world's developing countries in terms of GDP per capita.

The level of foreign direct investment (FDI) in the EAC countries has more than tripled over the past decade, from about $590 million in 2000 to around $ 1.7 billion in 2010 (the World Bank, 2012). Compared with average FDI for Sub-Saharan Africa (SSA) of about 4.3% of GDP in 2009, FDI flows to the EAC were somewhat lower at 2.5% of GDP in 2009 (World Bank, 2012). Although the level of FDI to the EAC is still relatively low, it has increased considerably over the past decade. Mozambique has also experienced strong FDI growth in recent years, doubling FDI inflows between 2010 and 2011, and now has much higher FDI than the EAC countries. Mozambique has twice the FDI level of Tanzania, which had the highest FDI level in the EAC in 2012.

In terms of the World Bank's ranking of the ease of doing business (benchmarked at June, 2012), Rwanda is placed the highest at 52, which is very good compared to the regional average. Uganda is ranked 120, Kenya 121 and Tanzania 134. Burundi ranks the lowest at 159, well below the regional average, indicating that the regulatory environment is not as favourable for the start-up and operation of a local firm (World Bank, 2012). The regional average for SSA is 140. Mozambique and Burundi rank below this. Kenya is placed the highest of all the 185 countries in relation to the ease of getting credit (12), far better than the SSA average of 109. Burundi ranks the lowest with a score of 167 out of 185 economies.

Several key drivers and trends can be considered to contribute to the growth of the EAC and Mozambique that also are predicted to continue shaping the development of these economies and their clusters.

The growth in this region results from more than their resources and increase in commodity prices, which are often recognized as main drivers of growth for this region. Other significant drivers include improved macroeconomic conditions, the ending of political conflicts and increased stability and better business environments. Several countries have ended recent conflicts such as Mozambique and Rwanda and focused on creating a more stable business environment and macroeconomic conditions. Below we will present some key drivers and trends with an emphasis on trends that are likely to shape the future of the economies in this region.
Transition economies - towards more diversified economies
The majority of the countries in the EAC along with Mozambique are considered to be transition economies (McKinsey, 2010). These economies have historically been heavily dependent on agriculture, but have increasingly moved more and more towards relying on the service and manufacturing sectors. All these countries are in the process of diversifying their sources of growth, some more than others. Kenya and Uganda are the countries that are moving the most towards a more diversified economy (in terms of larger share of service and manufacturing share of GDP) and are also considered to continue in this direction in the near future. This is an important path direction for these economies because a more diversified economy generally leads to an increase in the sophisticated demand of a population, a more modern economy that can more easily compete on a global level and stronger economic growth.

Increased trading among African countries
An important trend identified in this report is the increased trade with other regions and countries inside Africa. An especially interesting development found in this report has been the EAC region's strong growth in the share of exports to trading partners in SSA between 2000 and 2010. This clearly demonstrates that trade is increasing between regions in Africa. Mozambique is the only country that saw a decrease in its share of exports to SSA, although it increased its share of exports to South Africa in the same period. The increase in trade among African countries in this region leads to a higher level of cooperation and mutual dependency. A greater necessity for cooperation can pave the way for a more stable region with less conflicts and wars. Consequently, a key factor to ensure future growth will be to continue to expand the trade between countries in this region to create larger trading regions and to support each other to be able to compete on a global level. In addition, the countries will most probably seek to increase their trading and exports in general as this can represent an important source of financing for the improvement of their home infrastructure.

Demographic changes – growing middle class, young population and rapid urbanization
Another major driver of growth in these countries is the demographic changes that are taking place and will most probably continue to develop in the future. The populations of all of the countries are in growth and a significant proportion is very young (more than 40% of the population for each country is estimated to be below the age of 14). This has major implications for the working force in each country and results in an increased workforce and consumer base. However, such a large proportion of young people in the population also raise the need to educate this group of people to ensure that they are equipped with suitable skills and knowledge.

Moreover, the countries are all experiencing urbanization at different levels, cities are growing and a continued growth of the middle classes of these countries is expected in the future, which will lead to a population characterized by greater sophistication in demand and purchasing power. This trend will also support a reduction in poverty, which can be considered to be significantly large in some of these countries. Lastly, a larger, growing
middle class along with a growth in GDP and trade will help these economies to become more diversified (increase service and manufacturing share out of total GDP in the future.)

**Natural resources – will continue to contribute strongly to GDP growth for some of the countries**

Oil and gas exploration activities have been pretty slow in East Africa compared to other parts of the continent until recent years when foreign companies have made huge discoveries in the region. East Africa is estimated to have vast undiscovered reserves of oil and gas, particularly offshore Tanzania and Mozambique. Although a huge potential exists in this industry, it is important to emphasize that challenges remain in relation to lack of infrastructure and technology to extract the reserves. The large untapped potentials that are predicted for some of these countries can be of importance for the oil and gas sector in Norway.

Resource discoveries, investments from foreign companies and exports in general are also predicted to increase for these countries in the near future. This is a good way for a country to improve its infrastructure and other conditions through capital from investments by foreign companies and other countries.

**Green resources and technological developments**

A green revolution is predicted to take place in the sector of agriculture in the future similar to the ones that transformed the agriculture sector in Asia and Brazil. Such a revolution will lead to a significant increase in production through the use of new technologies and infrastructure.

A sharp increase in the use of mobile phones and the internet has recently taken place in most of these countries. Even though some of the countries have a long way to go, this rapid technological development is particularly relevant for industries such as green resources and agriculture due to the possibilities this development opens up for a very huge workforce. To provide a brief example, increased availability and access to information can change the way in which this industry operates. Local farmers can get access to information that supports them in their process of their agricultural work and networks between farmers can easily be established to share knowledge and experiences.

**Improved infrastructure**

The infrastructure of these countries is improving, particularly through exports revenue and foreign direct investments, and new infrastructure in terms of roads, electricity and energy is increasingly being developed. An important driver for the improvement of infrastructure is foreign companies making large investments in infrastructure in these countries in exchange for resources. The EAC countries and Mozambique needs to continue improving their infrastructures to be able to support growth in the future, and improving the infrastructure for transition economies is a necessity in order to be able to compete globally with other low-cost emerging countries.
4.1 National Cluster Export Portfolio for the largest clusters in terms of total exports in each country in the EAC and Mozambique 2000 – 2010

Jewelry, precious metals and collectibles is the cluster with the largest value of exported goods in Tanzania. The hospitality and tourism cluster is the second largest and the agriculture cluster is the third largest cluster in terms of total export. Jewelry, precious metals and collectibles and the tobacco are the clusters with the largest market share globally in Tanzania, and they also experienced the highest increase in world market share from 2000 to 2010.

The cluster of agriculture products is the largest cluster in Kenya in terms of export value. The cluster of transportation and logistics is Kenya’s second largest cluster in terms of exports. The cluster experienced one of the largest average growths in terms of export share globally compared to all the other clusters in Kenya between 2000 and 2010. Except for agriculture the largest clusters in terms of exports are service clusters in Kenya; Transportation and logistics cluster followed by hospitality and tourism and communication services in terms of export value. The transportation and logistics cluster is also the cluster that has experienced the largest average change in export share from 2000 to 2010 among the largest clusters. Kenya has the most sophisticated ICT infrastructure in the region favoring both the financial service industry and communication services. Kenya also has the highest percentage of Internet users and mobile phone subscribers in East Africa.

Metal, mining and manufacturing is by far the largest cluster in Mozambique in terms of exports compared to the other clusters in the country. The cluster has experienced one of the largest average growths in terms of export share compared to all the other clusters in Mozambique from 2000 to 2010. The tobacco cluster and the power and power generation equipment clusters are the clusters with the strongest average increase in share of exports during this period, a change of 0, 4% and 0, 11% respectively. The power and power generation equipment clusters is the second largest cluster in Mozambique in terms of total export.

The hospitality and tourism cluster in Rwanda is the largest cluster in terms of exports compared to the other clusters in the country. The agriculture products cluster in Rwanda was the second largest cluster in the country in terms of exports in 2009. The metal, mining and manufacturing cluster in Rwanda is among the four largest clusters in the country in terms of exports. The transportation and logistics cluster in Rwanda is also among the four largest clusters in the country in terms of exports.

The hospitality and tourism cluster is the largest cluster in relative terms in Uganda followed by agricultural products. The fishing and fishing products cluster is the third largest cluster in Uganda. The tobacco cluster and the fishing and fishing products cluster are the clusters with the strongest average increase in share of exports during this period in Uganda.

The figure below provides an overview of the largest clusters in terms of total exports in each country in the EAC and Mozambique and the different clusters world market share and change in world market share between 2000 and 2010.
Figure 71: National Cluster Export Portfolio for the largest clusters (total export) in the EAC and Mozambique 2000 – 2010


The figure is a comprehensive graphic illustration of the largest clusters in terms of total export in each country in the EAC and Mozambique. It focuses on the various clusters’ world export share in 2010 (y-axis - can be interpreted as market shares, world export share for relevant cluster in a country), the average change in the country’s share of export from the clusters in the period of 2000 to 2010 (x-axis) and the size of the clusters in terms of total exports (size of the bubble). The figure also shows the countries overall average of world export share in 2010 and the average change in the countries share of exports from 2000 to 2010 through the dashed lines vertically and horizontally respectively. Being above the line indicates that that the cluster is relatively specialized in the EAC and Mozambique region. Being to the right of the line means that the cluster is gaining share faster than what the EAC and Mozambique region is gaining (or losing) in share of global goods exports overall.
The hospitality and tourism cluster and agriculture cluster are among the three largest clusters in terms of total exports for all the EAC countries except for Mozambique, which has a somewhat different industry structure. None of the largest clusters in the EAC countries or Mozambique have more than a 0.5% global market share. However, some smaller sub-clusters have a higher market share. There are very few clusters among the EAC countries that are ranked among the top 20 in the world in terms of exported goods globally by the cluster; a few sub-clusters, however, do rank among top 20. With the exception of jewellery, precious metals and collectibles in Tanzania and Tobacco in Tanzania, Kenya, Uganda and Mozambique, none of the largest clusters experienced growth above 0.15% in world export share between 2000 and 2010. However, some of the smaller sub-clusters experienced more significant growth in world export share over this period, such as plants and flowers in Kenya, Tanzania and Uganda, electrical power generation in Mozambique, precious metals in Tanzania and processed seafood in Uganda and Tanzania.

### 4.2 Norwegian companies in the EAC and Mozambique in 2013

Green resources was the industry with by far the largest number of Norwegian companies in 2012 in the EAC and Mozambique region. This industry also experienced the greatest increase in the number of Norwegian companies between 2000 and 2012. There were also a considerable number of Norwegian companies in the region in knowledge-based services, renewable energy, environmental services and oil and gas, maritime and tourism, with a strong increase between 2000 and 2012. See figure below.

**Figure 71: Norwegian companies in the EAC and Mozambique in 2013**

![Norwegian Companies in EAC and Mozambique](image)

*Source: BI Norwegian Business School*
Of the 158 Norwegian companies in East Africa, 121 are located in the EAC and Mozambique region. Tanzania had the highest number of Norwegian companies in 2012 with 39, followed by Kenya (36) and Uganda (30) and Mozambique (14). These countries also experienced a significant increase in the number of Norwegian companies present from 2000 to 2012. Burundi had zero Norwegian companies in both 2000 and 2012, while Rwanda had zero in 2000 and 2 in 2012.

The hospitality and tourism cluster and agriculture cluster are among the three largest clusters in terms of total exports for all the EAC countries except for Mozambique, which has a somewhat different industry structure. Both these clusters have a relatively strong Norwegian presence in terms of number of companies. The presence of Norwegian companies reflects and matches the cluster export portfolio of Norway and the cluster export portfolio of the EAC countries and Mozambique. For instance, Kenya has the most diversified representation by Norwegian companies in terms of number of industries represented by Norwegian firms. This reflects Kenya’s relatively diversified economy and its promising and growing service sector. The offshore oil and gas and maritime clusters are the strongest clusters in Norway and the Norwegian clusters are present in most countries in the region with relatively many companies even if these clusters are relatively small clusters in the region today.
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