Swedish University of Agricultural Sciences
Faculty of Natural Resources and Agricultural Sciences
Department of Economics

Fruits of Knowledge

- A literature review of marketing strategies for mango production in Kenya

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Degree project · 15 hec · Basic level
Agricultural Programme –Economy Specialisation · Degree No 643 · ISSN 1401-4084
Uppsala 2011

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Credits: 15 hec
Level: Basic C
Course title: Degree Project in Economics
Course code: EX0538
Programme/Education: Agricultural Programme – Economy Specialisation

Place of publication: Uppsala
Year of publication: 2011
Name of Series: Degree project
No: 643
ISSN 1401-4084
Online publication: http://stud.epsilon.slu.se

Key words: Base of the pyramid, Developing Countries, Horticultural marketing, Infrastructure, Kenya, Mango production, Marketing Strategies, Rural development, Small-scale farming

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Acknowledgements

This literature study serves as basis for our master thesis, which will be a case study on strategic marketing of mango in the Nyanza province, Kenya. To be appropriate this literature study is thereby two-folded and covers both marketing perspectives and theories and mango production and marketing in Kenya.

The master thesis will mostly be carried out in the Nyanza Province in Kenya together with Vi-Skogen (The Vi Agroforestry Programme). The thesis will be a Minor Field Study (MFS), a grant given by the Swedish International Development Cooperation Agency (SIDA).

We would like to express our gratitude towards Cecilia Mark-Herbert, our advisor, for her endless commitment and positive approach. Her feedback has developed this project and us a lot. Thank you so much Cilla, we truly appreciate the energy you put into us. (And we know that you will be one of the factors that put our master thesis to a higher level.) Johan Toborn has also helped us with insightful hints, thank you Johan. Last but not least, we would like to acknowledge our helpful friends and family for your input, critics and support.

We hope that you appreciate our study 'Fruits of Knowledge – a literature review of marketing strategies for mango production in Kenya'

Fennia and Karin, January 2011, Uppsala

Summary

This report is a literature review that aims to describe marketing contexts for mango production in Kenya. The institutional conditions in the country are not well developed for marketing purposes, which causes many difficulties and problems for the society. In Kenya most mango producers are poor small-scale farmers with limited resources. Mango is a perishable commodity and to keep its value and quality it is essential to have the opportunity to sell the mangos in the right time. Inefficient and undeveloped infrastructure and marketing systems hinders the mangos to reach the market in time though, which causes large losses of produce.

The Kenyan mango production has increased during the last decade but due to market losses for the producer, the small-scale farmers' profits have not improved. The farmers' margins are low and losses of profit and produce strikes them hard. An important factor in the mango farmer's context is corruption. Kenya is one of the most corrupt countries in the world and the corruption highly affects the situation for the small-scale farmer negatively. There is great potential to reduce poverty in Kenya by for example improving the mango production and sales of mango. One possibility to keep the mango's quality is to process the fruit and by that add value. Examples of processed mango products are chutney, dried fruits, and juice.

Marketing strategies always need to be adapted to the specific situation and context. A possible marketing strategy suitable for the Kenyan context is perceived in the opportunity for small-scale farmers organizing into cooperatives. In such cooperatives financial resources and knowledge are gathered, which improves the opportunities, power and influence for the farmers'. By using a Base of the Pyramid (BOP) perspective in marketing, where the basis for all business activities is to develop among the poorest of the poor, new opportunities and solutions are shaped for their reality. Cooperatives and BOP have a united aim to strengthen the weak and increase their wealth. The weak infrastructure emphasizes the needs for new solutions. Like cell phone services, which is an example of new solutions adjusted for the poor that works as a BOP strategy. Increased and improved education and knowledge for the farmers are essential factors for rural development. Educated farmers that have more knowledge about their production will gain power towards the middlemen.

Sammanfattning

Denna rapport är en litteraturstudie som syftar till att beskriva marknadskontexten för mangoproduktion i Kenya. Mangoproducenterna i Kenya är till största del fattiga och småskaliga jordbrukare med begränsade resurser. Genom att förbättra mangoproduktionen och stärka marknader för mango skapas stora möjligheter till fattigdomsbekämpning.

Grundläggande marknadsförutsättningar såsom infrastruktur och marknadssystem fungerar mycket dåligt eller inte alls vilket skapar stora problem på olika nivåer i det kenyanska samhället. Mango är en ömtålig livsmedelsprodukt med kort hållbarhet vars kvalitet, och därmed även produktens värde, försämras snabbt. För att vinsten inte ska förloras är det nödvändigt att få ut mangon på marknaden i rätt tid. Detta hindras dock av ineffektiv och dåligt utvecklad infrastruktur och marknadssystem som inte fungerar. Därav förstörs en stor del av den producerade frukten. En möjlighet att ta tillvara på en större del av mangon är att förädla frukten för en ökad hållbarhet. Exempel på förädlade produkter är mango chutney, juice och torkad frukt.

Produktion av mango i Kenya har ökat kraftigt det senaste årtiondet men på grund av att mycket av frukten går till spillo, eftersom den förstörs innan den når marknaden, har böndernas vinst ändå inte ökat. De småskaliga mangobönderna drabbas hårt av förlorad vinst då marginalerna redan är små. Ett betydande problem för Kenya är korruption. Kenya är ett av världens mest korrupta länder vilket påverkar de småskaliga mangoböndernas situation negativt.

En marknadsstrategi måste anpassas efter dess specifika sammanhang och situation för att vara effektiv. En möjlig marknadsstrategi för småskaliga jordbrukare i Kenya är att organisera sig i kooperativ. På så sätt kan jordbrukarna samla sina ekonomiska resurser och den kunskap de besitter vilket ger bönderna större möjligheter, makt och inflytande. Begreppet Base of the Pyramid (BOP) är en marknadsstrategi utformad för de fattigaste delarna av världen. Inom BOP utvecklas marknadslösningar helt och hållet utifrån de fattigaste människornas förutsättningar. Både BOP och kooperativ syftar till att stärka de svagaste och förbättra deras välfärd. Kenyas outvecklade infrastruktur kräver nya lösningar såsom mobiltelefoner med anpassade tjänster. Kunskap och utbildning är avgörande för Kenyas landsbygdsutveckling eftersom bönderna genom kunskap har större möjlighet att påverka sin egen situation gentemot starka mellanhänder.

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1. Introduction

Mango is an important horticultural product in Kenya (HCDA, 2010) and this report is focused on conditions for mango production and sales. The following chapter introduces the problem and its implications.

1.1 Problem background

Kenya is a large horticultural producer in the world (Diao *et al*., 2007; www, FPEAK, 2, 2010; HCDA, 2010; Minot & Ngigi, 2004). The horticultural sector in Kenya includes fruits, vegetables and cut flowers (FAO, 2003). Commercial horticulture is an important income for a large share of the rural population (Dijkstra, 1996). One problem for the small-scale farmers in Kenya is that the profitability is low due to inefficiencies in infrastructure and marketing systems (Minot and Ngigi, 2004). The production of mango has increased the last decade, both in yields and total production (Diao *et al.,* 2007; Griesbach, 2003; Minot and Ngigi, 2004). Mango offers good income opportunities for small-scale farmers. The horticultural and fruit sector consist of many small-scale farmers that have contributed to the growth of productivity and production to a large extent (Minot & Ngigi, 2004).

Most Kenyan horticultural farms are small units of less two ha (Minot and Ngigi, 2004; Pers. Com., Nyberg, 2010). By organizing marketing systems for farmers there are several opportunities for Kenya to develop and gain financial and political resources, which may lead to decreased rural poverty (IFAD, 2010). Agriculture has had an increasingly impact on economic growth in Africa during the past 35 years (Diao *et al.*, 2007). Poorly functioning markets and lack of market opportunities constrain agricultural growth though.

"Horticultural marketing information and infrastructure is poorly organized" (HCDA, 2009, p.7). One might even go as far as to say that Kenya lacks a rural infrastructure (Boersma, 2006; Diao *et al.,* 2007; HCDA, 2010; Pers. Com., Nyberg, 2010; Pers. Com., Toborn, 2010). This is the major problem that causes inefficiencies on most markets in Kenya including the horticultural sector (HCDA, 2010). Output in terms of fresh-fruit is wasted because it does not reach the markets in time (HCDA, 2010; Pers. Com., Nilsson, 2010; Pers. Com., Nyberg, 2010). The bad roads also destroy the quality of the products due to bumps and long duration. This increases the transport costs and reduces the production margins for the small famers (Dijkstra, 2001; Omiti *et al.*, 2007). The contingency of roads and infrastructure in general also affects regional price variations that reduce the international competitiveness by not being able to offer a stable price picture. This is a bottleneck that needs to be challenged.

Mango is produced all over Kenya (Griesbach, 2003). Below is a map of Kenya's provinces (Figure 1).

Figure 1: Map of Kenya (www, KFA-UAE, 1, 2010).

Figure 1. is a map of Kenya and its seven provinces; Nyanza, Western, Rift Valley, Central, Eastern, North Eastern and Coast.

The table below shows the Kenyan mango production by provinces in 2001.

Table 1. Mango production figures in Kenya divided by provinces (Griesbach, 2003, p. 93)

Province	Area (ha)	Yield (t/ha)	Total production (t)
Central	543	8.9	4,826
Coast	8,230	5.5	45,592
Eastern	4,655	21.3	99,059
Western	979	7.6	7,446
Nyanza	1,458	9.4	13,691
Rift Valley	509	11.4	5,804
North-Eastern	168	19.2	3,220

The yield varies for the different provinces due to diverse conditions for growing mango (Griesbach, 2003). In the Eastern province the productivity (21.3 t/ha) is better than in the Coast, which is the least productive province with only 5.5 t/ha, although in the Coast mango is grown on 8,230 ha and in the Eastern only 4,655 ha are grown with mango. The total production is higher in the Eastern than the Coast but not four-folds as the productivity it is about the double. Both productivity and the land put up for mango production affects the mango production. Factors that affect productivity are weather and soil conditions, altitude, fertilization and cultivars among others. The table below shows that the mango production in Kenya has increased during the last decade.

Table 2. Total mango production in Kenya (FAOSTAT, 2010)

Year	2001	2002	2003	2004	2005	2006	2007	2008	2009
Prod: (t)	179,638	176,504	183,486	183,440	254,413	248,531	384,461	448,631	474,608

It can be concluded that the mango production has increased the last decade and the fact that most of the mango producers are small-scale farmers (Minot & Ngigi, 2004) this increased production meets several needs for the rural society - that of a very local need, the need for a family that produce mango, the need for a local market (the village), the need for a near-by city and possibly also for export. Kenya meet the essential conditions for growing mango and it is rather easy to grow (Griesbach, 2003), which makes mango production a good source for poverty alleviation. Crops of high nutritional value like mango high value-added potential and with possibilities for export are exceptionally valuable for Kenya as a country (www, FPEAK, 2010; HCDA, 2009). The latest rural poverty report by the International Fund for Agricultural Development (IFAD) concludes the problem for this study:

> *"Smallholder agriculture can offer a route out of poverty for many of them – but only if it is productive, commercially oriented and well linked to modern markets. But at the same time, agriculture today must use the scarce and fragile natural resources on which it is based more carefully: it must be environmentally sustainable and more resilient to increasing climatic variability"* (IFAD, 2010, p. 9).

1.2 Problem

The production and the importance of mango has increased the last decade in Kenya but due to bad infrastructure, particularly in bad roads, the production losses are large (Griesbach, 2003; Minot & Ngigi, 2004; Pers. Com., Nyberg, 2010). The lacking marketing system limits the opportunities for the small-scale mango farmers to reach the market.

These are some of the identified stakeholder perspectives on mango related problems;

- *Farmers* to get better education and knowledge and to access markets better to increase their margins and profit;
- *Local communities* where families depend on the sales of these crops;
- *Horticultural Crops Development Authority (HCDA)* whose vision is to have *"A globally competitive horticulture sector in Kenya"* and their mission is *"To Develop, Promote, Facilitate and Co-ordinate growth of a commercially oriented Horticulture industry through appropriate Policies and Technologies to enhance and sustain socio-economic development"*(www, HCDA, 1, 2010);
- *Fresh Produce Exporters Association of Kenya (FPEAK)* whose vision is *"To make Kenyan horticulture the Global choice"* and mission *"To develop, unite and promote the Kenyan horticultural industry in the global market with due regard to safety, good agricultural practices, social, ethical and environmental responsibilities"* (www, FPEAK, 1, 2010);
- *Society* at large to reduce poverty (IFAD, 2010) and;
- It is also an *environmental* issue due to waste of resources (IFAD, 2010).

1.3 Aim and delimitations

The aim of this study is to describe marketing contexts for mango production in Kenya. Particular interest is given to conditions for small-scale mango production. The literature review is divided into two parts; one is focused on marketing contexts and the other concerns the conditions for mango production. In the review of the empirical background both of these parts are integrated as a description of conditions for marketing context for the mango production in Kenya.

Research questions of particular interest are;

- How is mango produced?
- How does the mango industry look in Kenya?
    - What is the mango trade pattern for Kenya?
- How does food marketing systems work?
- What marketing strategies are suitable for Kenyan smallholders?

There are many possible perspectives to investigate in the area of this study and there is a lot of literature in the field. In studies like this cultural heritage and backgrounds can color the findings. Although this is a descriptive study and thus the risk is small. *"In qualitative research there is not necessarily a single, ultimate Truth to be discovered*" (Leedy & Ormrod, 2005, p.133) this report is based on our perspective.

The mango producer is the most important stakeholder in this study but his or hers view point was not available. The authors of the articles and reports in the literature review are researchers and experts with somewhat another perspective than the mango farmer and this will affect the conclusions. Most of the researchers in this field are men which might color the information as well.

Additional delimitations are closely connected to the choice of method and theory, which is why they will be further described in chapter two.

1.4 Outline

Figure 2 illustrates the outline of this report.

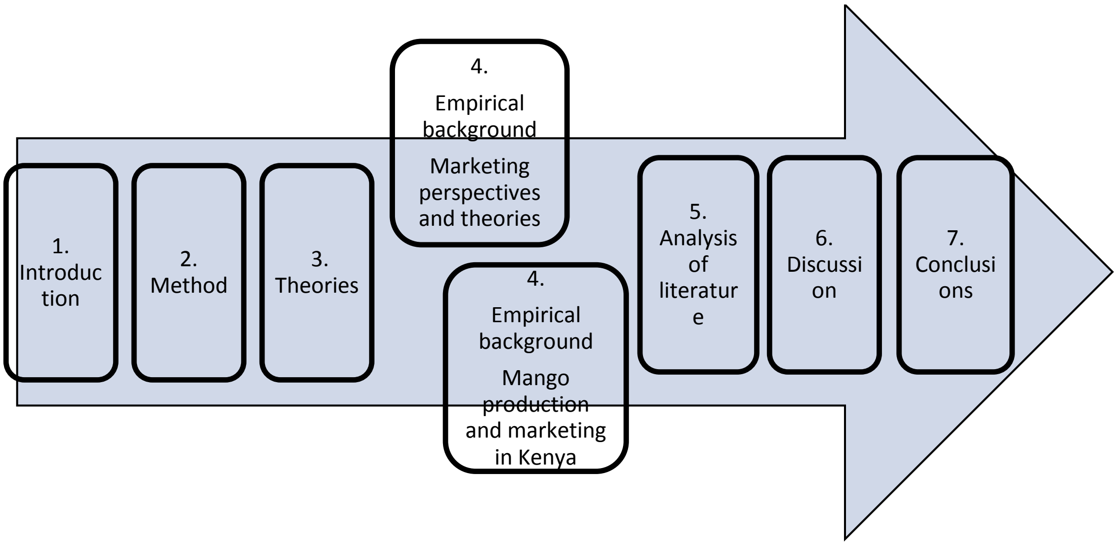

Figure 2. Outline for fruits of knowledge a literature review of marketing strategies for mango production in Kenya.

The outline of this bachelor thesis, illustrated in Figure 2, demonstrates the structure of the study. Chapter one introduces the problem and its implications and chapter two describes the literature review procedure. In chapter three the theoretical framework for this study is presented. The empirical background in chapter four is divided in two parts. The first part describes marketing perspectives and theories and the other describes mango production and marketing in Kenya. Both parts of the empirical background are needed to answer the research questions. The next chapter, chapter five connects the theoretical framework with the empirical data and in chapter six the thesis will be discussed and put in context and compared to other studies in this area. The last chapter concludes the findings and suggests areas for further studies.

2. Method and delimitations

The choice of methods depends on what kind of information that is sought for and the selected methods should be suitable for the research questions (Robson, 2005). This report is a flexible qualitative literature study that is focused on institutional contexts for mango production, and the relevant agricultural marketing strategies for the mango sector. This is an academic report although the intention is that the audience is anyone interested in agriculture in developing contexts. It is not necessary for the reader to be familiar with the subject prior reading this report. There are four Appendixes that provides the reader with more detailed information about: marketing strategy and systems, Kenya, mango and mango production.

The first phase in the process was to study mango production and the Kenyan context. During this phase trade patterns for Kenya's horticultural sector its export and international trade patterns for mango was examined. The next phase was to study marketing systems and strategies for agricultural and horticultural products in a developing country context. The report is based on secondary data.

2.1 Choice of literature and theories

Through a literature search the article 'Are Horticultural Exports a Replicable Success Story? Evidence from Kenya and Côte d'Ivoire', written by Minot and Ngigi (2004), published by the International Food Policy Research Institute (IFPRI) was found. Minot and Ngigi gave a holistic overview, which was relevant for the study. IFPRI is considered to be a relevant and trustworthy organization and their references to be valid. Relevant articles from Minot & Ngigi (2004) bibliography have been scanned carefully to find additional useful references and this came to be the approach throughout the study. Further 'Exploring Corporate Strategy' by Johnson *et al.* (2008) and 'Marketing Real People, Real Decisions' by Solomon *et al.* is used to give a general framework for marketing strategy theories. Our advisor recommended both Johnson *et al.* (2008) and Solomon *et al.* (2009). Johan Toborn who is an expert on development issues at the Swedish University of Agricultural Sciences (SLU) supports this approach.

To broaden the search for academic literature the following databases have been used systematically; Ag Econ, Applied Social Sciences Index and Abstracts (ASSIA), Emerald, Epsilon, JSTOR, Science Direct, and Web of Knowledge. The databases were chosen out of availability, and that they cover the subject. The databases were scanned through using the following keywords: "Africa", "agriculture ", "developing countr*", "farmer*", "Kenya" "mango prod*", "marketing strat*", and "small-scale". A screening of the articles was done to make sure that only articles relevant for the topic of the study are chosen. The key words were chosen after reading Minot and Ngigi (2004) and have been discussed with the advisor.

The literature that this report is based on was chosen out of relevance for the topic and the trustworthiness of the author and/or organization. Information from well-known organizations was used to get accurate data and when possible various sources validating the information, triangulation ensured the quality of the data. Further, recent articles and materials were chosen before earlier ones. To find basic knowledge about mango production and marketing strategies also older literature was used but to understand the current situation the search was concentrated between 2000 and 2010. The earliest written article is from 1964.

2.2 Empirical data collection

To get accurate empirical data about Kenya, mango production and trade patterns we have used the following sources;

- Central Intelligence Agency of the United States of America (CIA) to get information about Kenya, its population and other relevant facts using the key term "Kenya" in the World Fact Book by CIA;
- ENCYCLOPÆDIA Britannica (Britannica) to find facts about Kenya using the key term "Kenya";
- Food and Agriculture Organization of the United Nations (FAO) to get information about international and Kenyan mango production by the key terms "mango" and "Kenya";
- FAO statistics (FAOSTAT) to get production volumes, production areas and trade figures by the key terms "mango, mangosteens and guava[1]", "Kenya", "2008" (the latest accurate figures were those from the year of 2008) and;
- The United Nations (UN) to get key figures and information about Kenya using the key term "Kenya" for data.

CIA is a well-known organization that collects and gives information to the American state and the public. The data that CIA provides is to serve many different stakeholders so the accuracy of the information is in their interest. Though it is important to remember that the CIA perspective is American. The information that Britannica gives is trustworthy as well, its long history and scale should imply that their information is correct. The Kenyan history of being a Crown Colony (British) makes the British encyclopedia suitable. FAO is a well established organization under the United Nations (UN) and have high trustworthiness and it is of their as well as the UNs interest to give accurate and correct data. FAO is the ultimate source of international and agricultural data. The disadvantage of using the FAO and UN as sources of data is that the informants to the FAO and UN may have different agendas than the organizations. The selected sources can be combined to create triangulation. By triangulating the information from the selected sources trustworthiness increases.

2.3 Delimitations

The main focus in this study is Kenya and mango production and by that relevant information collected for other parts of the world may have been lost. A weakness in this report is the authors' lack of knowledge for mango and Kenya from the start. The sources of information

[1] The FAOSTAT groups mango production together with the production of mangosteen and guava.

that are used may contain faults that are not detected. There could also be important aspects that are not taken into account. The sources of information origins from different stakeholders with sometimes-different agendas, which is hard to evaluate. The report is limited to secondary data. Further, the advisor has no experience when it comes to either Kenya or mango production. Only English and Swedish articles and sources information are used.

A model by Jain (2000) has been selected for the theoretical framework. The model shows how the institutional context affects the marketing strategy for an organization, which is why it fits this study. Kohls and Uhl's (2002) model for food marketing systems is also a suitable model. Due to the high importance of the institutional context, Jain's model was chosen. The aim of this study is describe marketing contexts for mango production in Kenya, and the chosen model is most suitable to fulfill the aim.

Concerning the empirical findings this report is limited to what the mango farmer can do when the mango is harvested, the mango production is a given factor that have been the basis from where the sources of information origins from in this report. What happens before that is relevant for understanding the context but not examined deeper in this study. The main focus is the part of the marketing system between the farmer and the market.

The authors of this report were aware of the problems concerning wastage of agricultural products in the Victoria lake basin district in Eastern Africa. Further the authors knew that small-scale mango farming is common in the area and that the region lack in infrastructure. There are opportunities of growing cash crops, such as mango, for small-scale farmers and this is why this study is limited to Kenyan mango production.

2.4 Analysis of findings

"*Little sense can be made of a huge collection of data; therefore an essential part of research is the analysis of the data. This analysis must be carried out in relation to the research problem*" (Walliman, 2005, p. 301). The analysis needs to be relevant to the aim of the study.

The main reasons for the analysis in this report is to explore and explain the phenomenon of marketing contexts for mango production in Kenya and also to examine the marketing relationships for the mango sector. These reasons are found among Walliman's (2005) main reasons for analyzing data.

The approach is explanatory and according to Robson (2005, p.59) an explanatory study "*seeks an explanation of a situation or problem…to explain patterns relating to the phenomenon being researched; to identify relationships between aspects of the phenomenon*". To further discuss and deepen the analysis we have put our findings in relation to other studies.

3. Theory - marketing strategies and institutional contexts

This chapter outlines the theoretical framework used for the study. A model (Figure 3) is used to frame the empirical findings in this report. The model gives a broad perspective of a marketing strategy. It is important to know the internal and external environment to put the organization in a strategic position (Johnson *et al.,* 2008; Solomon *et al.,* 2009).

The following figure (Figure 3) represent the key elements of the marketing strategy formulation and the institutional context that needs to be considered in the making of a marketing strategy (Solomon *et al.*, 2009). This can also be called situation analysis, environmental analysis or business review.

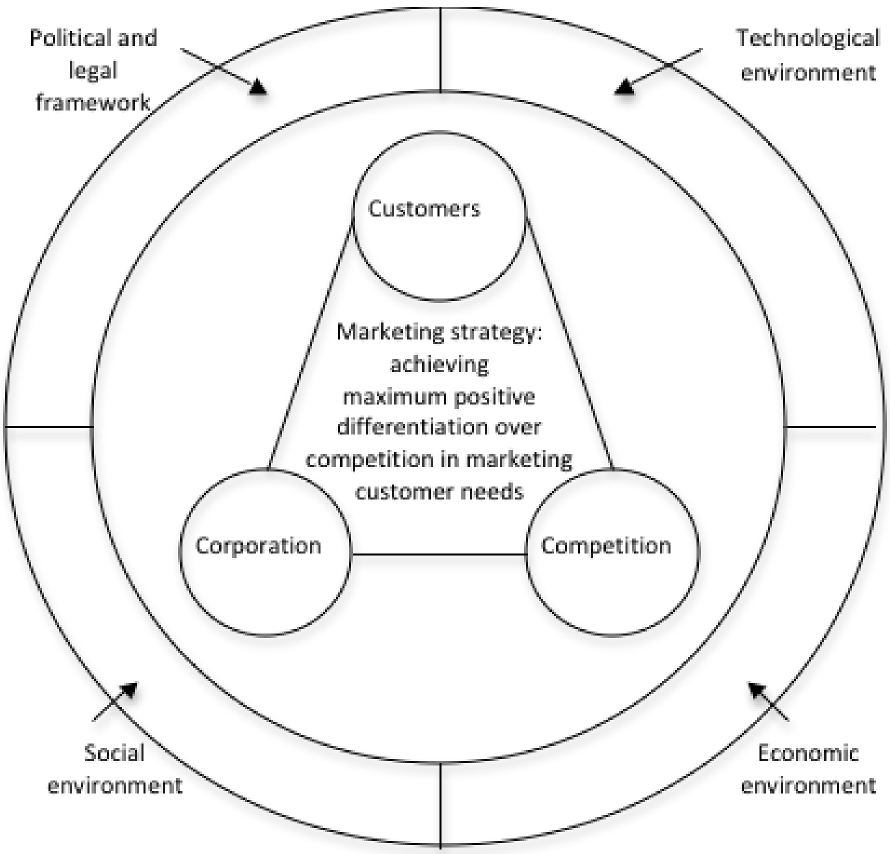

Figure 3: Key elements of marketing strategy formulation and the institutional context that needs to be considered in the making of a marketing strategy (Jain, 2000, p. 25).

The figure above (Figure 3) shows the institutional context, referred to as an environment (both internal and external) that affects the organization and changes constantly (Jain, 2000; Johnson *et al.*, 2008). The environment is different to different organizations. For example, if there is a strong legal framework for the environment where the organization X is located, X need to be very accurate in their actions and handling of toxic products like pesticides. The strong framework makes X's products more expensive in processing and the price is higher. Competing with other businesses that are located in areas of weaker environmental laws and regulations the legal framework can be considered to be both a threat or an opportunity for X. In this case the strong environmental laws and regulations can be considered an opportunity for X while marketing in the local market but a threat for the company in the global market where the products are more expensive and perhaps not even demanded. The surrounding environment and its variables gives the threats and opportunities for the organization. Continuing on the legal framework case, the actions to meet the harsher legal framework can also play a part in the economic and social environment. Internal and external contexts are further discussed in 3.1-3.2.

3.1 Internal environment

Solomon *et al.* (2009, p. 54) define the internal environment as "*all the controllable elements inside the firm that influence how well the firm operates".* The internal environment identifies the organization's strengths and weaknesses (Jain & Punj, 1993; Solomon *et al.*, 2009). The internal environment consists of the three Cs; the customers, the competition and the corporation (Jain & Punj, 1993). Examples of strengths can be technologies, relationship with suppliers, corporate reputation, financial stability, ability to produce high quality products, or physical facilities (Solomon *et al.*, 2009). These strengths could also be weaknesses. Internal strengths and weaknesses are mostly depending on human capital within the organization.

3.1.1 Costumer, competition and corporation

A good marketing strategy focuses on the organizations key elements and their interplay (Jain, 2000). The key elements of marketing strategy are primarily the three Cs, the customer, the competition, and the corporation. They all have their own aims and intentions but are equally important for the organization and its strategy (Jain and Punj, 1993; Jain 2000). Marketing strategies focus on how the organization can differentiate by creating higher value for their customers compared to other organizations and their products. That is why it is important to have "*positive matching of the needs and objectives*" between the customer and the organization continuously and ahead of the competition otherwise the strategy will fail and the customers choose the better competitor (Jain, 2000, p. 24).

"Businesses exist to serve customer needs"(Jain & Punj, 1993, p.36). The customer is the focus for the organization and always need to be. The organization need to match the customers' needs and wants at all times, otherwise the organization will lose the customer to a competitor. It is important to have knowledge about the customer and his or her preferred market to be able to reach the right customer. Knowledge about the customer and the market makes it easier to segment the market and arrive at the accurate market and reach the customer.

The competition is very important to pin down in the making of a marketing strategy. Porter (1979) identified the five key factors (Porter's five forces) to gain strengths against the competitors and they are: industry structure or degree of rivalry, threat of entry, substitute products, bargaining power of buyers, and bargaining power of suppliers. The interactions between the five forces also determine the concentration of competition in an industry (Jain & Punj, 1993).

For the corporation there are seven success factors, the seven Ss of strategy by Peters & Waterman (1982), that help to form and implement a corporate-level marketing strategy and they are;

> *"**structure** (the hierarchical arrangement of human resources in the organization); **systems** (procedures followed to ensure control during strategy implementation); **style** (management's decision making philosophy); **staff** (the management development process in the company); **skills** (the firm's unique competencies); **shared goals** (the firm's culture and management's value system); and **strategy** (the corporate mission)"* (Jain & Punj, 1993, p. 37).

These factors determine the corporation's competitive advantage. A more detailed explanation of internal environment is found in Appendix 1.

3.2 External environment

"*The external environment consists of elements outside the firm that may affect it either positively or negatively"* (Solomon *et al.*, 2009, p. 54). The external environment can be grouped into four categories: economic environment, technological environment, political and legal environment, and social environment (Jain, 2000). Solomon *et al.* (2009) divide the external environment in a similar way, into: economic and competitive, technology, political and legal, socio-cultural, and environmental trends. The external environment gives the organization's opportunities and threats (Jain, 2000; Johnson *et al.*, 2008).

3.2.1 Economic environment

> "*Understanding the economy of a country in which a firm does business is vital to the success of marketing plans. Marketers need to understand the state of the economy from two different perspectives: the overall economic health and level of development of a country and the current stage of its business cycle*" (Solomon *et al.*, 2009, p.55).

This statement stresses the fact that the organization needs to know the economic environment to succeed its marketing strategies.

Organizations can look to the gross domestic product (GDP) or gross national product (GNP) that are indicators of a country's economic health to adjust the marketing strategy (Solomon *et al.*, 2009). They can also look past the figures and look to what is done to reduce poverty, inequality and unemployment. "*A country's standard of living is an indicator of the average quality and quantity of goods and services a country consumes"*(Solomon *et al.*, 2009, p.56). Depending on if the country is less developed, developing or developed the emphasis of industry, use of technology, education, infrastructure and standards of living is different. The less developed a country is, the larger share of agricultural and rural employment. In developed countries the marketing systems are more sophisticated.

3.2.2 Technological environment

Technology can be a competitive advantage for the organization (Solomon *et al.*, 2009). Governmental programs influence the technological level in an industry. This level also has an effect on the business since it may affect the competitiveness. "*Changes in technology can dramatically transform an industry"* (*ibid,* p. 60). To be successful it is important to be updated and able to find trends in the external environment.

3.2.3 Political and legal framework

Depending on if the organization acts on the local, national or global markets it needs to consider different laws and regulations (Solomon *et al.,* 2009). Political decisions can affect the business operations and must be considered. It is important to understand the political system, which is more complex in the global markets arena. Legislations for different trade unions are essential to know to go global. The legal enforcement differs between countries and cultures.

3.2.4 Social environment

The social environment refers to the cultural values and believes in the society (Solomon *et al.,* 2009).*"Understanding consumer attitudes, beliefs and ways of doing things in different parts of the world is especially important to firms when developing a marketing strategy"* (*ibid,* p. 64). The organization needs to understand and adjust to the characteristics of the society and its citizens. Demographic factors such as age, gender, ethnic group, education, occupation, income and family structure are essential to know. The relation between sexes and the role of the family are also important factors for the organization to reflect on. Every society pass on a set of cultural values to its members, these values are beliefs of what is right and wrong, acceptable and unacceptable. Marketing must be adapted to the cultural values to be successful. One cultural aspect that might cause problems is language-barriers.

In this model the context plays an important role. In the making of a marketing strategy the organization is colored by the society at large and need to adapt to it, to get a superior marketing position. In Kenya the small-scale farmers need to adapt to many different environments in the society. In the next chapter more marketing perspectives and theories for mango production is presented as well as the context for mango production and marketing in Kenya. The international mango market will also be portrayed in a few words.

4. Empirical background

Due to the aim of this study the following chapter is divided in two parts. The first part is focused on marketing perspectives and theories. The second part describes the context for mango production and marketing in Kenya. The second part ends with a brief presentation of international mango trade.

4.1 Marketing perspectives and theories

This section starts with the evolvement of marketing and continues to describe different strategy approaches. After that the development of strategy is presented. Next cooperatives and assembly markets are introduced followed by theories about the Base of the Pyramid (BOP). The section ends with a brief introduction of food-marketing systems.

4.1.1 The evolvement of marketing

The marketing theory and practice is based on the marketing concept, which dates back to the 17^{th} century Japan (Jain & Punj, 1993). Although, first in the mid 1950s the marketing concept became an accepted notion in the business management sector. The focus for the marketing was set on to identifying a target segment and determining a marketing mix. During the1950s and the 1960s the business environment was stable and quite predictable and the marketing was mainly focused on operational actions such as the marketing mix.

Borden developed the marketing mix at Harvard University in the early 1950s (Borden, 1964). The marketing mix consists of the marketing tools that have been developed from Bordens' 'Market Forces Bearing on the Marketing Mix' and condensed to what we commonly refer to as the four Ps of marketing; product, price, place and promotion that is today considered to be the marketing mix (Armstrong & Kotler, 2005; Borden 1964). The marketing mix is usually concentrated to one product and its life circle, that is why the marketing mix is a good tool but it has a rather short run (Jain, 2000).

In the turbulent 1970s the business environment needed a strategic approach in marketing (Jain & Punj, 1993). The initial efforts for strategic marketing were finance focused. The former implementation and practice focus of marketing switched to "*choosing the right products for the right growth markets at the right time*" (Jain & Punj, 1993, p.35).

4.1.2 Strategy approaches

Johnson *et al.* (2008) presents four ways of using and developing a strategy. These are developed from Mintzbergs' (1978) definitions of strategy, and are the following: *Strategy as a design* is a logical process where the manager has a clear strategic direction. It is designed at the top management and goes down to the rest of the organization. This is the most common textbook view of how a strategy should be developed. *Strategy as experience* is when the organizations' future strategies are based on the managers past strategies experiences. The future strategies are developed trough bargain and negotiations between the different notions within the organization. *Strategy as ideas* is being used when there are innovative ideas, strategy as a design is top down and very set, the strategy as experience plays on the past, which is hard to do for new ideas. The strategy as ideas uses and promotes the whole organizations' experiences and differences to find to new strategies and ideas. Through this system new ideas emerge but will likely be discussed and battled for the survival against other ideas to pass as a new strategy. The last perspective is *strategy as a discourse.* In this strategy the managers' language with the rest of the organization is the command control. The way the managers use their language becomes crucial, also how they frame the strategic problems, present the strategy proposals, or debate issues are central. In this approach "*Strategy 'talk' matters*" (Johnson *et al.*, 2008, p. 22).

4.1.3 Developing a strategy

The previous paragraphs explain what a strategy is and its features, the figure and text below describes how a marketing strategy is developed (Figure 4).

Figure 4: Strategy levels (Inspired by: Cateora & Graham 2007; Jain & Punj, 1993; Johnson *et al.*, 2008).

There are three levels of strategies, first and the most overall is the strategic planning at the corporate level, called the (1st level) corporate-level strategy, which looks to the whole picture and is interested in finding value adding to the organization and the different business units (Cateora & Graham, 2007; Jain & Punj, 1993; Johnson *et al.*, 2008). The corporate-level is mostly focused on the long-term future and incorporates goals and directions for the whole enterprise also called corporate planning (Cateora & Graham, 2007).

The next level is the (2nd level) business-level strategy also called competitive strategy or strategic planning (Cateora & Graham, 2007; Johnson *et al.*, 2008). The business-level strategy focuses on how the particular businesses (incorporated in the corporate-level) should compete and manage. It is conducted at the highest levels of management and deals with capital, products, research and planning (both long-term and short-term). Under the business-level it can be a strategic business unit (SBU). The SBU is part of the organization but it focuses only to one distinct external market that no other unit does within the organization (Johnson *et al,* 2008). In smaller organizations the corporate-level and business-level are very similar or the same.

In the bottom of the organization the (3rd level) is found, the operational strategy. Here the strategy is very focused towards the end customer, the operational level also called tactical planning. Tactical planning is mostly about marketing and advertising issues (Cateora & Graham, 2007).

The theories in 4.1.1 – 4.1.3 have been about internal factors controllable for the organization itself. In 4.1.4 – 4.1.5 the theories are about organizing the organization into groups and/or alternative marketing strategies.

4.1.4 Cooperatives & assembly markets

To improve their bargaining situation the farmers could organize into marketing cooperatives (Dijkstra, 1996). Cooperatives have been used for more than a hundred years and are a form of private business organization, owned and controlled by the users (Barton, 2000). A cooperative consists of a group with similar business needs and interests. The aim for the cooperation is to provide benefit, ownership and or control to its users. The users are the owners but could also be described as customers with benefits. These benefits are not given in terms of ownership but in use, like cheaper input products or a guaranteed price for harvested commodities.

A cooperative can be viewed from three perspectives that reveal benefits, responsibilities, roles and what kind of transactions that are made with the cooperative (Table 3).

Table 3: User perspectives of cooperatives (Barton, 2000, p. 23)

User benefits and Responsibilities	**User roles**	**User transaction with cooperation**
Benefit: Purchase goods and services	Customer	Buy inputs
Benefit: Market farm products	Customer	Sell inputs
Benefit: Receive net income	Patron	Receive patronage refund
Ownership: Provide equity	Owner	Equity investment; -Stock purchase -Retained patronage refund -Per unit capital retain Equity redemption
Control: Provide governance	Member	Vote to elects directors, approve articles, bylaws, major actions

Table 3 illustrates the use of a cooperative for various stakeholders. Depending on what kind of cooperative the farmer plays different roles and receives different outcomes. A farmer may also be a member of a cooperative to get social benefits (Barton, 2000).

The cooperative business form is common in the agricultural industry but it is used in many different sectors (Barton, 2000). Cooperatives are beneficial for farmers because they can gather their financial resources. Trough the cooperative the farmer perform business that would not have been economically possible for them in solely. By forming cooperatives it is possible for the farmer to receive larger profits. Cooperatives make it possible for farmers to purchase services and inputs such as fertilizer and feed at lower costs. The farmers can also access markets that they could not have reached by themselves and market their products at higher prices. Traditionally, most cooperatives are small and operate in small geographic areas.

A food assembly market is a form of cooperative that is common in Africa (Dijkstra, 1996).

> "*African governments have to play their part in creating an institutional framework in which efficient and effective marketing channels can develop. One aspect of such a framework involves food assembly markets in production areas, where grain and other food commodities can be assembled before going on transport to urban centers*" (Dijkstra, 1996, p.26).

Food assembly markets in Africa works like a cooperative and develops the marketing system. According to Dijkstra (1996) the importance of food assembly markets is a crucial success factor in food production, which arises that the governments should encourage them.

When the market conditions are free, rural assembly markets can develop to efficient marketing systems (Dijkstra, 1996). Such an assembly market concentrates demand and supply, thus transportation and transaction costs decrease (Dijkstra, 1996; Omiti, 2007). This is a way to create a more efficient marketing channel. Further, food assembly markets makes development of price more transparent.

4.1.5 Base of the Pyramid, eradication of poverty through market-based solutions

Governments, nongovernmental organizations (NGOs), aid agencies, and large firms have all been involved in the developing world, focused on doing good and eradicate poverty through their perspective (Prahalad, 2006) (Figure 5). The notion has not been that market-based solutions, but aid, can lead to poverty reduction and economic development, which is illustrated in Figure 5. As Prahalad (2006, p. 9) put it "*The dominant logic of each group is different, but the conclusions are similar*" and to reach development and economic growth the intellectual barrier need to be crossed.

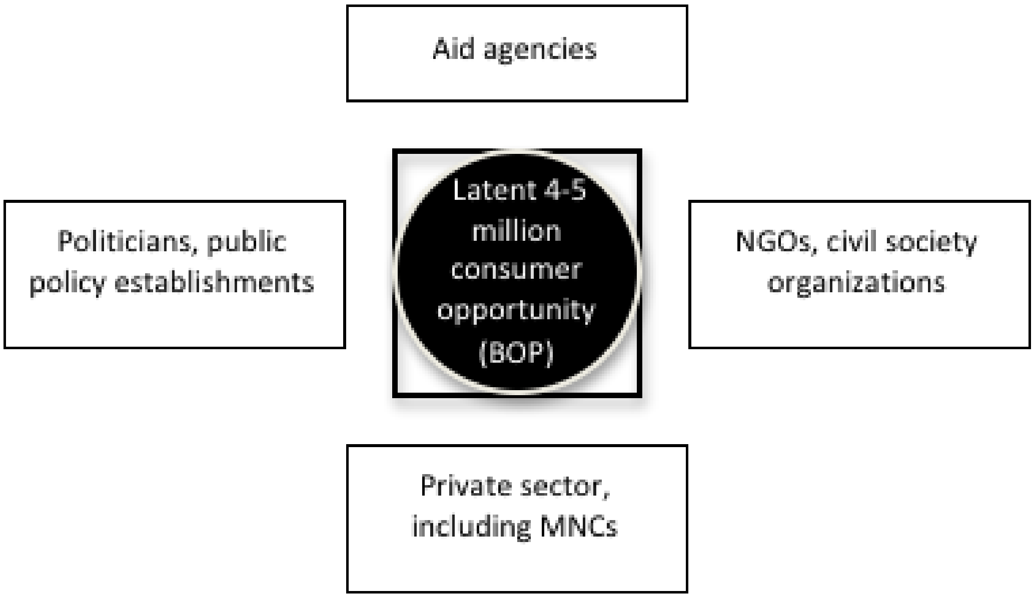

Figure 5: The influence of dominant logic (Prahalad, 2006, p. 9).

"*If we stop thinking of the poor as victims or as burdens and start recognizing them as resilient and creative entrepreneurs and value-conscious consumers, a whole new world of opportunity will open up*" (Prahalad, 2006, p.1). There are 4-5 million people that are surrounded and helped by politicians, aid agencies, NGOs and the private sector. These 4-5 million people are also latent consumers, which is a huge opportunity for business and poverty eradication. The following figure (Figure 6) of the economic pyramid illustrates how the economic wealth is contributed in the world.

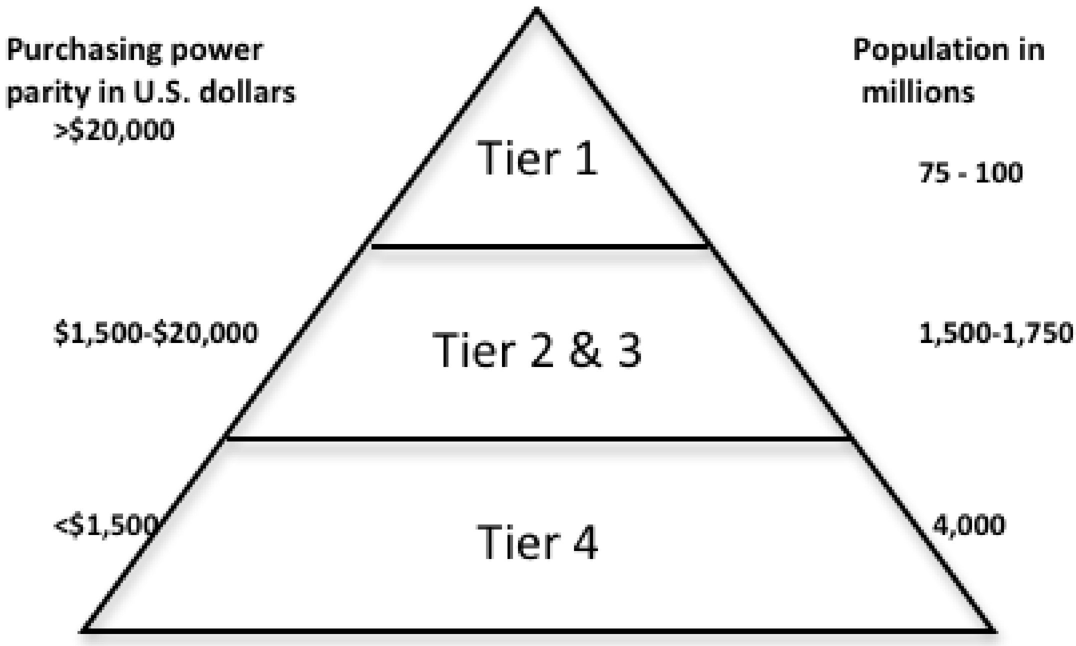

Figure 6: The economic pyramid of the world's wealth and population (Prahalad & Hart, 2002 p.5).

The economic pyramid in Figure 6 illustrates the different wealth tiers of the world's population and their possible consumption (Prahalad & Hart, 2002). The different tiers are sorted after their wealth and ability to generate incomes. The left hand side of the pyramid informs about the wealth and the right hand side points out how many that belongs to the specific tier. The first tier, which consists of 75-100 million people, that has a yearly purchasing power parity of over US$20,000 consist of wealthy upper-income people in developed countries concentrated to USA, Western Europe Japan and also a few rich elites in the developing world (Hart, 2007; Prahalad 2006; Prahalad & Hart, 2002). The second and third tire consists of the 'emerging middle class', the poor customers in the same regions. The fourth tier covers the low-income market with 4 billion people that have less than US$2 a day, the bottom of the wealth pyramid or the poorest of the poor.

The poorest of the poor. The people in the fourth tier live in rural villages, urban slum or shantytowns (Prahalad & Hart, 2002). In these societies the informal economy is large, 40 to 60 percent of all the business activities in developing countries are informal (Prahalad & Hart, 2002). The poorest of the poor lack education and the legal framework is weak, there are rarely deeds to assets or legal titles. The fourth tier is hard to reach trough the traditional distribution, credit and communication channels.

The unmet opportunities for the poorest of the poor. The supply of products and services are low in both quality and quantity for the fourth tier (Prahalad & Hart, 2002). There are market opportunities for serving this huge market segment. Traditionally multinational corporations (MNCs) have their system and products and do minor changes of the products to adapt the product and marketing for the poor. This is a big mistake according to Hart (2007), Prahalad (2006), Prahalad and Hammond (2002) and, Prahalad and Hart (2002). The whole system needs to change, from the bottom and up.

Most MNCs have neglected the poorest of the poor for many years (Prahalad & Hart, 2002; Hart 2007, Prahalad 2006). That is because most MNCs are used to the wealthiest segment that include most of their customers. Most MNCs have developed their marketing strategies with the wealthy western customer in mind and functions thereafter. When MNCs focus on emerging markets they use the same marketing system that works in tier one, which reduces their potential. "*Global and emerging market strategies have not realized their full potential… [MNCs have] targeted only the few "large market" countries such as China, India and Brazil*" (Hart, 2007, p.115). The challenge is to adapt and orientate to the emerging market and go from the bottom up.

4.1.6 Food marketing systems

"*The performance of all business activities involved in the flow of food products and services from the point of initial agricultural production until they are in the hands of consumers*" is Kohls and Uhl (2002, p.2) definition of food marketing. The definition is very wide and includes everything that happens in the commodity's life circle from the farmers' production decisions to the end consumers' choices. The marketing system is important to know for all involved stakeholders. For food producers it is important to understand their marketing system since sales, prices, and income depend on it. For the consumer, the food supply and prices depend on the food system. The people in the business also depend on it. Also the citizen has interest in food marketing system.

In the food industry there are three main stakeholders food producers, food marketing firms, and food consumers. The government, interest organizations, media, allied industries in transport and energy, and communication industries also have interest in the food industry.

Kohls and Uhl (2002) states that the marketing system consists of two major types of activities, the physical handling and the exchange part that deals with the price setting. The physical handling part concerns storage, processing and transfer of raw and processed goods from the producer to the consumer. A deeper explanation of how food-marketing systems work can be found in Appendix 2.

4.2 Mango production and marketing in Kenya

This section starts with an introduction of Kenya and continues to describe marketing in a developing context. After that the importance of good infrastructure and rural challenges are presented followed by facts about mango. Next marketing of mango in Kenya today is described and the section ends with a brief part about international mango trade.

4.2.1 Kenya

Kenya is a former British colony located in the sub-Saharan Africa[2] (Firestone *et al.,* 2009; Insight Guides, 2007). In Kenya there are 39 million inhabitants and 50 percent of the population lives below the extreme poverty line[3](www, CIA, 1, 2010; www, UNDATA, 1, 2010). In 2008, 78 percent of the inhabitants lived in rural areas. The agricultural sector covers 75 percent of Kenya's labor force but the unemployment rate is high, 40 percent (*ibid*). Almost half of the output and 75 percent of the total agricultural production origins from small farms (2-5 ha.) (Omiti *et al.,* 2007). The agricultural sector in Kenya provides food, income and employment.

Since the 1960s Kenya has been a successful horticultural producer, canned pineapples, and fresh vegetables have been large contributors for their export since then (Minot & Ngigi, 2004). The sector has developed along the years in the late 1980s the export of green beans took off. Since the mid 1990s cut-flowers have gained a large share of the total horticultural production, and the export of it has grown rapidly compared to vegetables and fruits.

Development in Kenya is slowed down by a large number of reasons[4] such as widespread poverty, declining economy, corruption (Transparency International, 2009; Pers. Com., Zetterberg, 2010), ethnic tension, rapid population growth, fluctuating agricultural production and yields, soil erosion, declining soil fertility, and land fragmentation (Ekbom, *et al.*, 2001). Foreign investment has decreased due to corruption, which has become a severe threat to the Kenyan economy and development. Ethnic tensions are a big problem as well. Since the

[2] A detailed map of Kenya is found in Appendix 3.
[3] Extreme poverty = less than US$ 1.25 per person and day (IFAD, 2010; www, UN, 1, 2010)
[4] These problems are explained more in detail in Appendix 3.

independence there has been political turbulences in Kenya (Firestone *et al.*, 2009; Freedom House, 2009). Kenya has been unsuccessful in producing enough food to keep up with the rapid population growth since the 1970s (Ekbom, *et al.*, 2001).

Kenya suffer greatly from HIV/AIDS, 1,5 million Kenyans are infected (www, Avert, 1, 2011; Pers. Com., Kinch, 2010). In 2009, 42.8 percent of the population was younger than 15 years old and only 4.3 percent of the population was older than 60 (www, UNDATA, 1, 2010). In 2009, 1.2 million children are orphans due to AIDS in Kenya (www, Avert, 1, 2011). For more information about Kenya see Appendix 3.

4.2.2 Marketing in developing countries

"*A marketer cannot superimpose a sophisticated marketing strategy on an underdeveloped economy. Marketing efforts must be keyed to each situation, custom tailored for each set of circumstances*" (Cateora & Graham, 2007, p. 256). Marketing strategies need to be adapted to the institutional contexts. Depending on the level of economic development the marketing strategy is challenged differently. Characteristic for marketing in developing countries is that marketing structures often are at various stages simultaneously (Cateora & Graham, 2007). Advanced and modern retail markets are often functioning side by side with traditional food markets.

The less developed a country's economy is, the less variety of marketing functions is demanded (Cateora & Graham, 2007, Pers. Com., Toborn, 2010). Thus, the institutions that perform marketing functions are less specialized and sophisticated. Agriculture in developing countries has been unfavorable for the small-scale farmers due to poor domestic environments such as low levels of investments in agriculture, bad policies, uncompetitive markets, lacking rural infrastructure, critical financial and production services and, lack of natural resource management (IFAD, 2010). On the global markets the prices for agricultural products have increased. Through this change in the agricultural markets there are new possibilities for small-scale farmers all over the world but improved domestic environment in rural areas of developing countries is required. As the economy in a country develops the marketing channels and distribution does the same (Cateora & Graham, 2007; Pers. Com., Toborn, 2010).

To get an accurate picture of the market and the operating context it is essential to develop and implement strategy (Walters & Samiee, 2003). Information is highly important for marketing planning. There are several challenges to overcome when gathering information in developing and emerging markets though. "*Indeed, the literature suggests that the lack of reliable information is a key reason for the absence of formal corporate planning activities in many developing markets*" (*ibid.*, p. 98).

"*Improving competitiveness of agricultural products in international, regional, and domestic markets is the key to expanding market opportunities*" (Diao *et al.*, 2007, p. 27). Marketing, infrastructure, communication and transport are rudimentary in Africa, even compared to development countries in other parts of the world, and African agricultural products are often not competitive. High marketing and transportation costs, low productivity, agricultural policies and trade barriers are reasons for the low competitiveness. To increase competitiveness several measures needs to be done; increase productivity, reform institutions, and infrastructure to reduce transaction and transportation costs and enhance regional cooperation. One of the major challenges for small-scale agribusiness in developing countries is to identify new markets (Fromm & Nyhodo, 2007).

4.2.3 Infrastructure and marketing

The degree of infrastructure development in a country highly affects the potential of economic growth (Cateora & Graham, 2007). Infrastructure is an crucial part of the economic structure in a country (Pers. Com., Lindgren, 2010) and it is essential for a well functioning production and marketing (Cateora & Graham, 2007). Infrastructure is an essential component facing marketers. Railroads, roads, seaports, financial networks and communication networks are all important parts of the infrastructure. Transportation of commodities is necessary to reach the market and without sufficient transport, distribution costs can increase considerably. Credit and banking facilities, advertising agencies, marketing research agencies, and storage facilities are other parts of infrastructure that make it efficient to conduct business and marketing. In recent years the importance of cell phones, and cell phone use has increased in Kenya (Pers. Com., Nilsson, 2010).

A country may be unable to export commodities due to lack of infrastructure even though it has the ability to produce them (Cateora & Graham, 2007). When the infrastructure in a country is insufficient to support an expanding economy and population, the economic development starts to fall behind.

4.2.4 Rural challenges

In the year of 2000 all the member nations of the United Nations (UN), including Kenya, agreed to reduce poverty by half before 2015 (www, UN, 2, 2011). To achieve this the eight Millennium Development Goals (MDG) were made. The MDG is to; end poverty and hunger; universal education; gender equality; child health; maternal health; combat HIV/AIDS; environmental sustainability and; global partnership. Since then progress for achieving the MDG has been made but still 1.4 billion people live in extreme poverty[5] and two thirds of them live in rural areas in developing countries, most of them in sub-Saharan Africa (IFAD, 2010).

To achieve the MDG the IFAD has pointed out four key issues for rural economic growth. They are: to improve the overall environment of rural areas, enable poor rural people to manage risk and to reduce their level of risk, to invest in education for the rural population to develop skills to take advantage of new economic opportunities and to strengthen the collective capabilities of rural people.

Agriculture is based on natural resources where land and water are the most important factors (IFAD, 2010). To sustain in agriculture all farmers need to be economic with scarce resources, handle and plan for long-term issues. The competition for land and water is growing. The climate change is another critical factor that needs to be considered for the agricultural sector. Poor farmers in already exposed areas are usually hit harder by climate change and environmental destruction. Knowledge and education for the farmers is necessary to meet the changing environment successfully.

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[5] Extreme poverty = less than US$ 1.25 per person and day (IFAD, 2010; www, UN, 1, 2010)

4.2.5 Mango

Mango origin from India where it has been cultivated for 4000 years (Fivaz, 2009; Njuguna *et al*., 2009). Today mango is produced in more than 90 countries, mostly in tropical and subtropical regions (Fivaz, 2009, p. 30). The total area of mango production in the world was 3,69 million hectares in 2004 (Fivaz, 2009). According to Evans and Mendoza (2009) the world production of mango was 28,51 million tonnes in 2005 of which nine percent was produced in Africa. India is the largest mango producer in the world followed by China and Thailand (www, FAOSTAT, 1, 2010). The aggregated production of ten countries constitutes about 80 percent of the total worldwide production (Jedele *et al.*, 2003, p. 4). Asia produces 77 percent of the global production, America 13 percent and Africa nine percent (www, FAOSTAT, 1, 2010)

The demand for mangos has been increasing worldwide the past decade (Fivaz, 2009; Jedele *et al.*, 2003). The world production has increased by 60 percent over the past 20 years. Mango production is mostly prosecuted in developing or emerging countries (Jedele *et al.*, 2003). Only one percent of the mango producing countries is developed and the mango production in industrialized countries is very limited.

Mango is not an indigenous crop in Kenya but it has been cultivated in the area for centuries (Griesbach, 2003). Today, Kenya is the thirteenth largest mango producer in the world (www, FAOSTAT, 1, 2010) and the total production was 183,000 tonnes in 2003 (FAO, 2003). Over the last ten years mango has been the third most important fruit in Kenya in terms of area and total production. For a more information about mango and a more detailed description of how it is produced see Appendix 4.

4.2.6 Marketing of mango in Kenya today

Marketing of horticultural products has been free of direct government interventions for the most part (Minot & Ngigi, 2004). The Kenyan horticultural domestic marketing channels are often integrated by professional middlemen and traders that mediate between the consumer and the farmer (Boersma, 2006; Dijkstra, 2001). Most of the traders are women.

The degree of product differentiation is very low, and advertising is slightly used and brands do not exist (Dijkstra, 2001). A low price is the most important factor for most consumers. The Kenyan horticulture markets are characterized by intense competition and the supplied and demanded quantities control the price. The farmers often lack knowledge on alternative product uses, options for value addition and alternative marketing possibilities (FAO, 2003).

Transport is the largest cost in the Kenyan horticultural trade (Dijkstra, 2001; Omiti *et al.*, 2007). Hired porters, donkeys or tractors, often perform short distance transports in rural areas. Handcarts are common in urban areas. Other costs are packing materials and market fees. Infrastructure is a major constraint in marketing (FAO, 2003).

Very few farmers sell their products at large urban markets (Boersma 2006; Dijkstra, 1996). The farmers mostly sell their products at the farm or in local markets. In both cases the farmer depend on the middlemen to receive current prices in the markets. When selling at the farm the farmer have to deal with middlemen, traders who come to the farm to purchase. Farmers that sell at local market places can sell either directly to consumers or to middlemen.

Both input and output markets for agricultural products are inadequately developed (Ekbom, *et al.*, 2001). The supply of inputs such as fertilizers, seeds and pesticides is scarce. The farmers mostly sell their products to local middlemen at a fraction of the price they could have received at larger markets, in Nairobi for instance. This is due to that the farmers are poorly organized. The higher the level of education is in a country, the larger the flexibility and willingness to develop the production (Pers. Com., Lindgren, 2010). The purchases of local traders are fluctuating in terms of price and size, which implies uncertainty for the farmers and causes large losses of crops. Cooperatives are not common in Kenya but the Kenyan government has been promoting cooperatives to avoid exploitation by traders (Minot & Ngigi, 2004).

Fruits are perishable commodities and as soon as they are harvested they start to deteriorate and do so through their marketing processing (Kohls & Uhl, 2002). To maintain the farm-fresh value it is important to have a rapid and efficient marketing system. Up to ten percent of the value of fresh-fruit is lost during the marketing process trough bad storage and handling, spoilage trimming to improve appearance, careless handling by shoppers, and theft. To keep the fruit fresh and keep a high quality during marketing sophisticated and developed marketing channels, facilities and equipment are needed. The transportation is the key. The perishablilty affects the pricing and the price negotiations because the fruit cannot be held for long periods to get better contracts. 'Sell it or smell it' is a saying within the sector. Mango is an easily damaged product with short shelf life, which implies difficulties in marketing (Schoorl & Holt, 1986). There are three main markets for mangos; export, domestic processing, and domestic fresh-fruit.

The mango prices vary substantially; the price of one mango at a local market in Kenya is about five Kenyan Shillings (KES) which is less than 0,5 Swedish Krona (SEK) (www, Forex, 1, 2010; Mutunga, 2010). The price of one mango at a European supermarket is about 200 KES, which is slightly more than 18 SEK.

4.2.7 International mango trade

Mango constitutes 50 percent of all tropical fruits produced in the world and it is produced in over 90 countries (Jedele *et al.*, 2003). Less than four percent is traded. Although the international production and trade for mango has increased since the 1990s due to lower prices for consumers, year-round availability, fewer trade barriers, changes in food consumption preferences, longer shelf life for mangos, and increased demand for healthier foods (Evans & Mendoza, 2009). Horticultural production in Kenya is mostly aimed for the domestic market but exports are important in terms of foreign exchange (Dijkstra, 1996). The biggest part (96 percent) of the mango production is consumed domestically and a very small share is processed. (Jedele *et al.*, 2003; Minot & Ngigi, 2004). The major part of the produced mango in Kenya does not meet export standards (FAO, 2003).

Mexico is the largest mango exporter in the world followed by Brazil and India (Evans & Mendoza, 2009; Jedele *et al.*, 2003). The largest producer is India. Latin America is the most important exporting region followed by Asia. USA is the largest single market importer then follows the European Union (Evans & Mendoza, 2009). Japan, Singapore, and Hong Kong are important markets as well (Evans & Mendoza, 2009; Jedele *et al.*, 2003). North America represents 42 percent of global fresh mango imports, Europe accounts for 24 percent and the

Far East 17 percent. One third of the European import goes to the Netherlands and is re-exported to other European countries from Rotterdam.

Today fruits are among the most important commodities for Kenya's export (www, Britannica, 1, 2010; Minot & Ngigi, 2004). Although the long history of exporting horticultural products, the cash crops[6] are not providing the expected amount of profit (HCDA, 2010). Horticultural Crops Development Authority (HCDA) in Kenya stresses to "*meet the increasing demand for top quality produc[tion]e in the export market*" (www, HCDA, 2, 2010).

Kenya's primary export market is Europe with a focus on the UK and the Netherlands (www, CIA, 2, 2010). The market for fruit and vegetables has changed in Europe, where larger supermarkets and the consumers demand more control and traceability of what they are purchasing (Minot and Ngigi, 2004). Food safety issues and the rise of larger supermarkets make it harder for small farmers to be competitive. Key fruits for Kenya's exports are mangos, avocadoes and passion fruits (www, FPEAK, 2, 2010). The UK, the Netherlands, Germany, and France are the main importers of fruit and the middle-east market is the main outlet market for Kenyan fruits.

[6] Cash crop is a crop that is grown for profit (www, Princetown, 1, 2010)

5. Analysis of literature

In this chapter the two sections from the empirical background are connected with the theoretical model and each other. The two sections from the empirical chapter will be evaluated differently. The first section of the empirical background is analyzed towards internal or external use of the theories. Meanwhile the data from the second section is analyzed according to the same structure as in the theory chapter (chapter 3).

This chapter is divided in two parts, internal and external environment, and the subgroups from the theoretical model are used. The internal environment and the three Cs by Jain (2000) will be the first. After that, the external environment divided into political and legal framework, technological environment, social environment, and economic environment will end the analysis.

The evolvement of marketing has primarily developed in the western part of the world and most marketing strategies and theories are developed to fit "*sophisticated marketing systems, strong private enterprise, and market potential for many goods and services*" (Solomon *et al.*, 2009, p. 56). Mango on the other hand is mostly produced in developing and emerging economies where the marketing systems are poor and at various stages simultaneously (Cateora & Graham, 2007; Ekbom *et al.*, 2001; Jedele *et al.*, 2003).

5.1 Internal environment

The internal environment in this case is the mango production at the farm and all the elements that are controllable for the farmer (Solomon *et al.*, 2009). How to meet the customers' demand and the competition is also a part of the internal environment. The marketing perspectives and theories described in the empirical background that fits for the internal environment are: strategy approaches, the core of marketing strategy, and developing a strategy. Parts of the food marketing systems also fit the internal environment.

5.1.1 Customer, competition and corporation

In this case the mango farmer's customers are both the end consumers and middlemen that mediate between farmers and consumers (Boersma, 2006; Dijkstra, 2001). According to Jain and Punj (1993) the customer should always be the focus for the organization. The mango farmer though is focused on the farming activities. Differentiation, advertising or branding towards the customer is uncommon in Kenya, which means that the customer focus is very low (Dijkstra, 2001).

The customer's needs and wants must always be considered (Jain & Punj, 1993) and the mango consumers in Kenya prefer cheap products prior to high quality (Dijkstra, 2001). The mango farmer's objectives are to sell mango and make profit, which is hard to achieve when the customers are not willing to pay. This imply that the mango farmer have difficulties to meet the customers' need and wants and reach his or her own goals at the same time.

It is important to have knowledge about the customers and their behavior (Jain & Punj, 1993). FAO (2003) state that the farmers in Kenya often lack knowledge about alternative product uses, options for value addition and marketing possibilities. Thus it is difficult for the farmers to reach the right customers and understand the demand. Further, the farmer need to arrive at the accurate market to please the customer (Jain & Punj, 1993), which is a big problem in Kenya due to the external environment (FAO, 2003). The farmer needs to sell the mangos as soon as possible due to perishability and short shelf-life (Kohls & Uhl, 2002; Schoorl & Holt, 1986). Mangos are easily damaged which makes the time of market entry crucial. The lacking infrastructure in Kenya makes it very difficult for the farmer to reach the market in time (FAO, 1, 2003; Minot & Ngigi, 2004). Thus, in this case internal factors are depending on the external environment in terms of infrastructure.

To target the customers it is important to be aware of the competition (Jain & Punj, 1993). The industry structure for mango production in Kenya consists of many small-scale farmers with intense rivalry (Dijkstra, 2001). The farmers compete against each other but also against the middlemen that they depend on due to their contacts and knowledge about the markets (Boersma, 2006; Dijkstra, 2001; FAO, 1, 2003). The bargaining power for the small-scale farmers towards buyers is reduced due to the dependency of middlemen. The rivalry and bargaining power of buyers are the only two of Porter's five forces (1979) that are analyzed in this study. Due to delimitations (see chapter 2.3) the other three are not considered.

The corporation in this case is the Kenyan small-scale mango farmer with a production area of two to five ha. (Minot & Ngigi, 2004). The units of corporations are small and numerous. The small-scale farmers are skilled in growing mango, which is shown by their contribution to the increasing productivity and production. Skill is the only S out of Peters & Waterman's seven Ss (1982) that is mentioned in this chapter due to the focus in this study. The customer, the competition, and the corporation have their own aims and intentions but are equally important (Jain, 2000; Jain & Punj, 1993). All together they are very important factors for the choice of marketing strategy.

5.1.2 Marketing perspectives and theories

The strategy approach is a tool for marketers to develop a strategy (Johnson *et al.,* 2008; Mintzberg, 1978). The four different perspectives are appropriate for different internal contexts. In the theoretical model (Figure 3 in p. 8) the strategy approaches belongs within the corporation circle because the strategy approaches deal with how the corporation handles the marketing strategy. *Strategy as experience* is when the strategy is based on past experiences. Bargain and negotiations within the organization creates future strategies. For the mango sector in Kenya the farmers bargain and negotiate with middlemen (Boersma, 2006; Dijkstra, 2001; Ekbom *et al.*, 2001). The middlemen have more power than the farmer in this situation, which makes the negotiation unequal and disadvantageous for the farmer (Ekbom *et al.*, 2001). Instead s*trategy as ideas* could be more favorable for the farmer where new ideas and solutions are promoted. This study is based on secondary data only, which means there is no information that reveal the mango farmer's future plans or goals, which is necessary to know when analyzing the different strategy levels within the corporation.

5.2 External environment

The external environment affects an organization and its strategy (Johnson *et al.,* 2008; Jain, 2000; Jain & Punj, 1993). The external environment for mango production in Kenya is described in the following section. The marketing perspectives and theories described in the empirical background that fits for the external environment are cooperatives and assembly markets and BOP. Parts of the food marketing systems also fit the external environment.

5.2.1 Economic environment

The overall economic health and level of development in a country is very important when making a marketing strategy according to Solomon *et al.* (2009). Half of the population in Kenya lives in extreme poverty (www, CIA, 1, 2010; www, UNDATA, 1, 2010). In 2008 the GDP per capita for Kenya was US$788.1 and GNP for Kenya US$783.4 (www, UN, 1, 2010). Kenya has signed the eight MDG that aims to reduce poverty (www, UN, 2, 2011).

According to Cateora and Graham (2007) and Toborn (2010) the marketing institutions in a developing country are less specialized and sophisticated. To construct a marketing strategy in Kenya the level of economic development is crucial. The marketing strategy needs to be adjusted for the very case and its economic opportunities (Cateora & Graham, 2007). In developed economies, on the other hand, the market is more developed and the fundamental conditions work, which is not the case in Kenya (Pers. Com., Toborn, 2010).

The standard of living is another indicator of the economic situation in a region that decides the quality and quantity of demanded products and services (Solomon *et al.*, 2009). In Kenya 78 percent live in rural areas, and 75 percent of Kenya's labor force are involved in the agricultural sector (www, CIA, 1, 2010; www, UNDATA, 1, 2010). These data indicates that Kenya's level of development is low (Solomon *et al.*, 2009). Although the agricultural and food production has increased the last decade (www, UNDATA, 1, 2010). The level of education is important to increase (and in some cases sustain) the development of an economy (Solomon *et al.*, 2009). In Kenya though, only 36.3 percent of the students in third level are women. Educated women are important for the economic development in Kenya (Pers. Com., Nilsson, 2010).

The rural infrastructure in Kenya is lacking (Boersma, 2006; Diao *et al.*, 2007; HCDA, 2010; Pers. Com., Nyberg, 2010; Pers. Com., Toborn, 2010). Cateora and Graham (2007) state that the degree of development in infrastructure in a country highly affects the potential of economic growth. The development in Kenya has slowed down since the 1970s, corruption being the major threat (Ekbom *et al.*, 2001).

In Kenya the markets are inadequate and unsatisfactory both for producers and consumers (Pers. Com., Toborn, 2010). Transaction costs are high due to bad infrastructure and prices fluctuate greatly. There are several basic conditions that do not work, which make it hard to apply traditional economical theories.

5.2.2 Technological environment

Producing mango is an agricultural activity which requires rainfall, a pH value of 5.5-7.5, deep soils, a temperature between 20-26°C, good drainage, and an altitude between 0-1200 meters above sea level (Griesbach, 2003). By foremost early irrigation the yield and quality of the mango improves. Nitrogen fertilizer is necessary. These factors are required for all mango production. Technology can be a competitive advantage but at the farming level the mentioned factors are basic conditions for growing mango that must be fulfilled and does not give any competitive advantages. Although, irrigation is a competitive advantage for the farmer, especially for the young seedlings. Farmers that have access to irrigated land has an competitive advantage with a possibility of higher yield and quality.

Technology is of higher importance when the mango is harvested due to perishability (Kohls & Uhl, 2002; Schoorl & Holt, 1986). The transport of the harvested mango to the market is the most critical stage in mango production (FAO, 1, 2003; Minot & Ngigi, 2004). Transport is also the largest cost in the production (Dijkstra, 2001, Omiti *et al.,* 2007) and that makes it harder for the poor farmers to be competitive. In Kenya the transport of mango is inefficient due to bad roads and transportation facilities. It is necessary for the farmer to be updated and to continuously develop the production.

5.2.3 Political and legal framework

Kenyan produced mangos are mostly sold at domestic markets (Dijkstra, 1996). The political system affects the marketing strategy (Solomon *et al.,* 2009). The political situation has been unstable since the independence in 1963 (Firestone *et al.,* 2009). Kenya is also one of the most corrupted countries in the world (Pers. Com., Zetterberg, 2010; Transparency International, 2009). Both the corruption and the political condition affect the mango producers and their possibilities to create a good marketing strategy and system. Due to the fact that the mango farmer need to follow political decisions and adapt to them when considering the marketing strategy the level of insecurity is high, which makes it difficult to be a successful entrepreneur (Solomon *et al.,* 2009).

To increase the export of mango Kenya also needs to consider the global market's demand and the receiving countries' laws and regulations (Solomon *et al.,* 2009). The small-scale farmers both lack in education and power (FAO, 1, 2003; IFAD, 2010). The low level of education in Kenya makes it difficult for the rural population to have enough knowledge about foreign rules of law, demand, and marketing systems. On top of that the many small-scale farmers' power versus the middlemen is weak. More knowledge gives the farmer an advantage in comparison to the middlemen and increases the opportunities for the farmer (Pers. Com., Lindgren, 2010).

5.2.4 Social environment

A marketing strategy needs to be adjusted to the cultural values and believes of the consumers (Solomon *et al.,* 2009). In Kenya the consumers demand low prices on mango (Dijkstra, 2001). Most of the mango is sold on the local and rural markets where the consumers are in the same economic situation as the farmers.

In Kenya there are many different tribes of people and the history holds many disagreements and volatile political systems (www, Britannica, 1, 2010; Firestone *et al.,* 2009; Insight Guides, 2007). Since 2002 the political rights and the civil liberties has increased (Freedom House, 2009) but the political system crashed down after the elections in 2007, which led to fights between the different ethnic groups in Kenya where over 1000 people died and 200,000 became homeless (Firestone *et al.*, 2009). There are still disturbances in Kenya that affects the social environment (Pers. Com., Nilsson, 2010).

The Kenyan government have high set goals to decrease its poverty and manage the MDG by 2015 (www, UN, 2, 2011). IFAD's focus on rural economic growth will improve the economic and social environment in Kenya (IFAD, 2010). One example is to invest in education for the rural population. One huge threat for Kenya's future is HIV/AIDS (IFAD, 2010).

5.2.5 Marketing perspectives and theories

Cooperatives have more power than the farmer alone (Barton, 2000) and thus it is an element in the external environment that affects the farmer positively (Solomon *et al.*, 2009). The aim for the cooperation is to provide benefit, ownership and/or control to its users (Barton, 2000). Being part of a cooperative increases the possibility to receive larger profits by being in power of the input market for example. The farmers can improve their economical environment by gathering their financial resources, and they can also improve their technological environment by cooperating. Being involved in a cooperative the farmers get a stronger position towards the otherwise strong middlemen and politicians (Boersma, 2006; Dijkstra 1996). By organizing into cooperatives the farmers get a larger influence in the society. A cooperative also gives social benefits and thus improves the social environment (Barton, 2000).

The theme for BOP theory is to increase market power for the economically weakest in the society and to find new ways of achieving economic growth trough entrepreneurial solutions at the bottom of the economical triangle (Hart, 2007; Prahalad, 2006; Prahalad & Hart, 2002). In Kenya 50 percent of the population live in extreme poverty (www, CIA, 1, 2010; www, UNDATA, 1, 2010) and belongs to tire four of the economic pyramid. The BOP theory requires new perspectives on marketing. BOP offers mostly marketing strategies applicable for rural and undeveloped societies such as Kenya. The external factors such as economical, technological, political and most of all social environments are very important for a successful BOP. The social environment is crucial for the BOP.

6. Discussion

The following chapter aims to address the research questions stated in chapter one, based on the theoretical framework and the empirical findings. The outline for the discussion follows the research questions. This chapter also puts the findings from this study in relation to other studies and reports.

6.1 How is mango produced in Kenya today?

Mango production in Kenya has increased in yield and productivity the last decade (Boersma, 2006; Griesbach, 2003; Minot & Ngigi, 2004). Small-scale farming is a way of fighting poverty and one reason for the increased mango production is the Kenyan government's goal to reduce poverty to obtain the MDG (HCDA, 2010; IFAD, 2010). There are also several nongovernmental organizations working with poverty issues and promoting small-scale farming. By increasing and supporting small-scale mango production the Kenyan government attacks the rural poverty, which is widely spread in Kenya (www, Britannica, 1, 2010; www, CIA, 1, 2010; www, UNDATA, 1, 2010). Kenya has a long and positive history of horticultural production and export (Minot & Ngigi, 2004), which is why the choice of mango production for poverty alleviation is logical. Also Kenya have all the necessary conditions for mango production (www, Britannica, 1, 2010; Griesbach, 2003).

Kenyan mango production as a mean for poverty alleviation (HCDA, 2009 & 2010; IFAD, 2010; Minot & Ngigi, 2004; www, UN, 1, 2010; www, Vi-Skogen, 1, 2010) and a opportunity for the rural population is the focus in most of the literature covering the topic. Although, it might be better to focus on entrepreneurial solutions. By the commercial focus the farmers creates profit and finds new solutions and by that new opportunities for prosperity.

One positive example of horticultural production is the production and export of pineapples that spurred in the 1970s (Minot & Ngigi, 2004). The reasons of the success were many but most prominent seems to be a demand for high quality pineapples and international companies with business minds. According to literature in this study no external business organizations have been present in the Kenyan mango production. Perhaps skilled entrepreneurs could find opportunities for mango production and export in similar ways as the pineapple case.

6.2 How does the mango industry look in Kenya?

Kenya as a whole is corrupted (Transparency International, 2009) and so is the mango sector. This is a major reason why the entrepreneurial solutions to fight poverty might be difficult to obtain and sustain in Kenya. If the small-scale farmers act commercially and jointly, for example in cooperatives, they get a more powerful voice and position. This way corruption can also be targeted from the bottom up and not only by international organizations and donors. When the small-scale farmers demand a well-functioning market and society without bribes, more pressure will be put on politicians.

The largest share of produced mango is sold and consumed as fresh-fruit (Dijkstra, 2001; Jedele *et al.,* 2003; Minot & Ngigi, 2004). Due to perishability and inefficient transports large amounts are wasted. One way of avoiding this problem is to process the fruit into higher value products such as chutney, dried fruits or juice. This require investments in both financial capital and knowledge. Better storage facilities are also possible solutions to keep the fruit fresh and maintain the quality.

6.2.1 What is the mango trade pattern for Kenya?

Knowledge and education are the key factors to understand the customers' demand and gain more power than the middlemen. Due to the high insecurity level caused by the inefficient political system the farmers put their focus on production, by adding knowledge they get more power compared to middlemen and politicians.

Fruits are one of the most important commodities for Kenya's export (www, Britannica, 1, 2010; Minot & Ngigi, 2004). The challenge is to make better profits for the producer, from the production and to develop the export markets. In the export market there are larger profits to obtain but export require high quality products. To export fresh-fruit better storage and transport facilities are critical and need to develop. Another opportunity to sell mango at the export market is to differentiate the product and find alternative uses. To do this successfully it is essential to target the right customers and offer them unique products with a high added value. Although, the obstacles to succeed in the export market are more than keeping a high quality. Corruption, legislation, trade regulations, and delivery guarantees are all identified as possible barriers to export.

6.3 How does food marketing systems work?

The mango marketing system in Kenya has two main problems and that is the middlemen position and the bad infrastructure. The middlemen control both the input and output markets and the farmer is in their power. The rural infrastructure is badly developed, especially the roads. The farmers are dependent on external factors. To increase the independence they need to find necessary information of accurate prices, qualities and products. The revolution of cell phones in Africa plays an important role for this development (Pers. Com., Nilsson, 2010). Cell phones are rather cheap, phone call cost is low, and the mobile network is developed even in the rural areas of Kenya. Due to the low investment and low variable costs cell phones are accessible for the small-scale farmers. Cell phone services offer large opportunities for the future.

6.4 What possible marketing strategies are suitable for mango producers?

The context surrounding an organization is always important to consider when developing a good marketing strategy (Jain, 2000; Johnson *et al.*, 2008; Solomon *et al.*, 2009). Most marketing strategies assume that the institutional contexts for markets are in place and that society provides basic conditions and infrastructure. In this case where the market is imperfect (Pers. Com., Toborn, 2010), the context and society at large becomes even more important factors to adapt to. In a perfect market, the adaption to the context may be an competitive advantage. In the Kenyan context the adaption to the external environment may be a survival strategy. The small-scale mango farmers are directly dependent of their profit which may be of decisive importance.

Given the facts that the context is of high importance and the mango farmers are many and small entities, unorganized, have everything to gain by organizing into larger units (Dijkstra, 1996 & 2001). This has been stated by many researchers and in many studies (Barton, 2000; Ekbom *et al.,* 2001; Hart, 2007; Prahalad, 2002 & 2006; Prahalad & Hart, 2002; Walters & Samiee, 2003). By starting to involve in cooperatives, assembly markets or developing other possible solutions with a BOP perspective the farmers can increase their profit, develop their business and ideas and also gain power in relation to the strong middlemen and the political system. This can lead to better business ideas and solutions, exchange of knowledge and experiences and a higher level of evolvement.

7. Conclusions

Marketing strategies must be adapted to the specific situation and context. In Kenya the external environment is crucial and something that the small-scale farmers need to consider. The basic conditions in Kenya that serves as premises for developing marketing contexts are not functioning which causes many difficulties and problems for the society. The small-scale farmers live in rural areas and are often poor, which imply that they are hard-stricken. The most prominent deficiencies for the small-scale mango farmers are bad infrastructure and inefficient and undeveloped marketing systems. These shortcomings leads to wastage of produce and lost profits. The farmers' margins are already low and the losses impact the farmers negatively. Corruption is a big problem in Kenya that also affects the weak farmers negatively.

The lacking marketing systems need to improve and develop which can be targeted from different perspectives and directions. Increased and improved education and knowledge for the farmers is essential for many reasons. Educated farmers that have more knowledge about the production and the customer's demand can find more opportunities to make profit. They also gain power towards the middlemen. Another perspective is to organize the farmers into larger entities like cooperatives. That way they can gain financial and political power. Through cooperating and gather economic resources the farmers can improve the marketing systems for example by investing in storage facilities.

The weak infrastructure requires new solutions. The use of new technologies such as cell phones has increased and offers a variety of services and opportunities for the farmers. Uses of cell phones make the farmers less dependent on middlemen. These are new solutions adjusted for the poor that works as a BOP strategy.

Throughout this study the problems with lacks in infrastructure have frequently been penetrated. The middlemen's power has also been a critical condition for small-scale farmers. Solutions to overcome these obstacles need to be found. It is in our beliefs that technological solutions and services hold a key, which is why it would be an relevant and interesting area for future studies.

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Appendix 1, The core of marketing strategy

This appendix is a more detailed explanation of the internal environment within the theoretical model from Chapter 3. A good marketing strategy focuses on the organizations' key elements. The key elements of marketing strategy are primarily the three Cs, the customer, the competition and the corporation (Jain, 2000). The figure below illustrates the core of marketing strategy (Figure A).

Figure A: Three major components that are essential in the making of a marketing strategy (Jain & Punj, 1993, p. 36).

The figure above (Figure A) shows the links and points that the organization need to target to answer the three questions necessary for establishing a marketing strategy (explained in next paragraph). The organization needs to decide what customers to concentrate on to succeed on launching a new product or strategy. Questions like how, when and why targeting a particular customer group is of importance. The help of market evaluation can answer the questions above. In the extension of the customer, the organization also need to take the market into account, if they choose to focus on a new customer group they need to know and evaluate where to find that customer, if they are represented in his or hers market segment or if there are any market boundaries to reach the desired customer. The competition also needs to be targeted to answer the three key questions. Related to the competition the organization needs to consider its industry, suppliers and buyers and get them to fit the strategy. Customer substitutes for the product that the organization supplies the market with and of course new competitors, new entrants to the market. Further it is important to include the corporation itself. The structure, the systems, the style, skills and shared values are necessary to know. If the corporation itself does not have the skills, the systems or the structure to launch a new product the strategy to do so may be useless. The interaction between the three Cs is necessary to embrace when constructing a market strategy.

The following three questions need to be answered when conducting a marketing strategy: (1) where to compete, (2) how to compete, and (3) when to compete (Jain, 2000). To answer these the organization needs to consider the three Cs and decide upon them, which is illustrated by Figure 7. For the first question the target market need to be defined, the organization need to decide if they are to compete across the entire market or in niche markets. For the second question the organization have to decide how they will compete, that can be by offering a new product or by "*establishing a new position for an existing product*" (Jain, 2000, p. 24). The third question is to decide the market entry, to be the first one or wait for competitors.

To summarize, Jain (2000, p. 23) states that a good marketing strategy is characterized by a (1) clear market definition, a (2) good match between corporate strengths and (3) the needs of the market and superior performance relative to the competition in the key success factors of the business.

Appendix 2, Food marketing systems

An overview of general food marketing system is shown in Figure B. It consists of product flows, the marketing channels (the arrows), a mixture of firms also called middlemen (the dotted boxes), and the business activities (marketing functions).

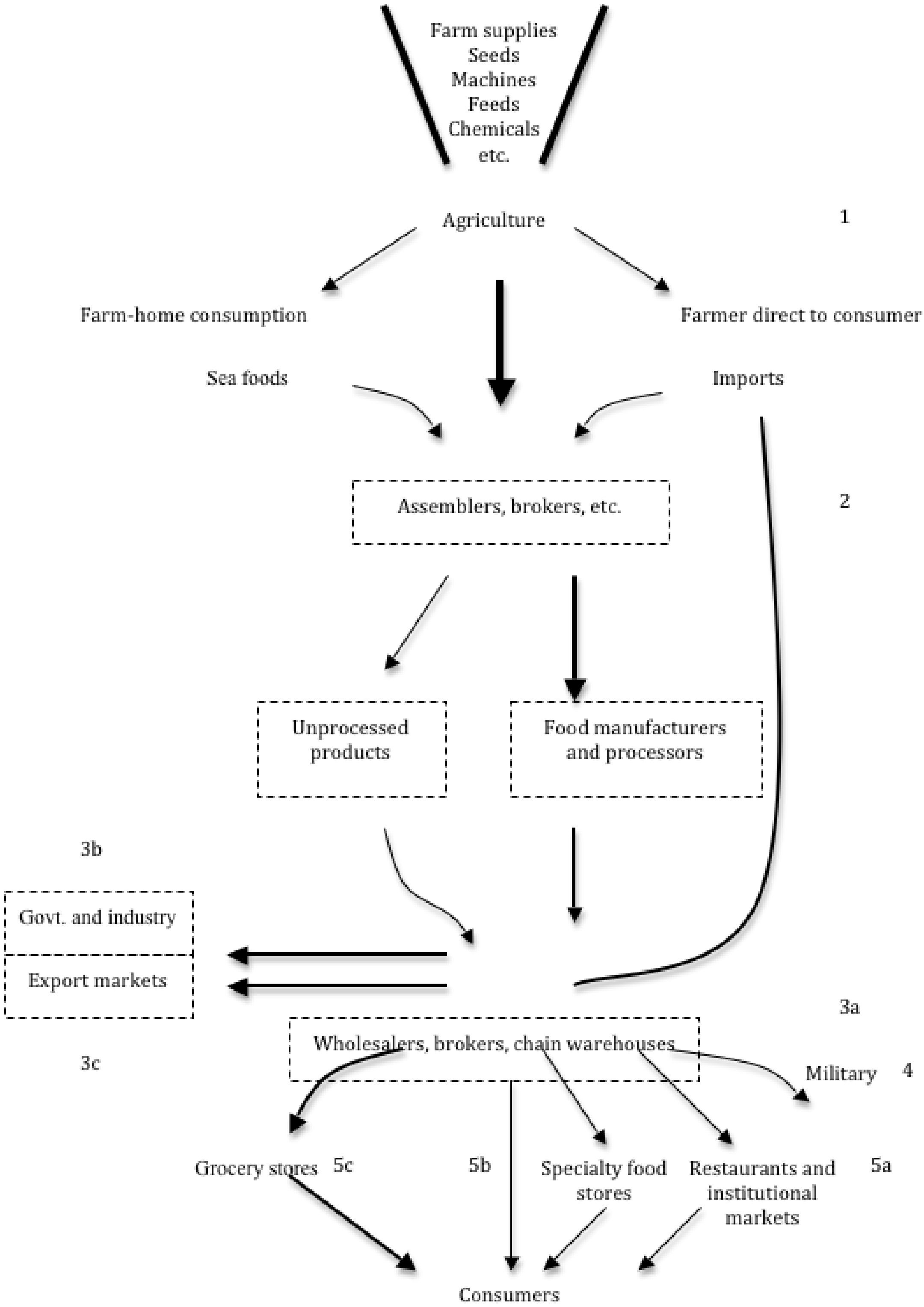

Figure B: A chart of a food marketing system that illustrates the stakeholders and flows (Kohls & Uhl, 2002, p.9)

The food system starts at the (1) farm where the production also starts. The farmer needs different inputs like seeds and fertilizers to grow and produce his or her stock. After the production the farmer can either use the produced commodities for ‘farm-home consumption’, sell it direct to the consumer or sell to a broker, assembler. The (2) assemblers and brokers collect their purchased products and can add other inputs to the commodity, and process it or just sell it, as it is, to (3a) wholesalers, brokers, chain warehouses (or similar). Some of the commodities are sold to (3b) government and industry and some goes to (3c) export markets. The wholesalers, brokers and chain warehouses sales it to (4) the military, (5a) restaurants and institutional markets, (5b) specialty food stores, or through (5c) grocery stores. They can also sell direct to the end consumers. What 5a,b, and c all share is that they sell their products to the end consumer.

A product shall not be produced unless it has a market; the first marketing is the farmers’ production decision. The farmer is not only a producer; he or she also performs food-marketing functions on the farm. The farmer can also extend his or hers operations to off-farm activities by being a member of cooperatives or similar arrangements. Also food-marketing companies sometimes cross over to the farmers’ role and involve in the farm activities. The line between food production and marketing is thereby hard to draw and the complexity makes the farmers and food-marketing firms both complementary and competitive. *“The essence of marketing is management decision making”* (Kohls and Uhl, 2002, p 7).

The farmers can be diversified and produce many different commodities or specified and produce only a single product (Kohls and Uhl, 2002). Most farm products are perishables and vary in quality. Agricultural production is seasonal and often geographically concentrated to areas away from the consumers. Farm products need to be collected and fast transported to markets or stored for later use. According to Kohls and Uhl (2002) transportation, storage and processing are the basic marketing activities in agricultural marketing. Between the farm and the consumer many different types of firms are involved, different kind of middlemen. The food industry is divided into three components the input sector the farm sector and the product market sector. Factors that influences fruit marketing are: perishability, large price and quantity variations, seasonality, alternative product forms, bulkiness of product, and geographic specialization for production.

Appendix 3, Kenya

Geographically, Kenya is located in east Africa along the Indian Ocean and the equator bisects Kenya (www, Britannica, 2010). Kenya neighbors the Somali republic in the east, Ethiopia and the Sudan in the north, Uganda and lake Victoria in the west and Tanzania in the south. Kenya is divided into five different regions; in the south lake Victoria basin; the vast plateau of eastern Kenya; the coastal belt along the Indian Ocean (~400 km); and the highlands that are divided by the Great Rift Valley, on the western side are the highlands of the Mau Escarpment; and on the eastern side are the highlands and mountains of the Aberdare Range, where Mount Kenya is located (www, Britannica, 2010). Kenya inhabits many different ethnicities that live in different regions of the country, the map below Figure C illustrates them and Kenya's many languages.

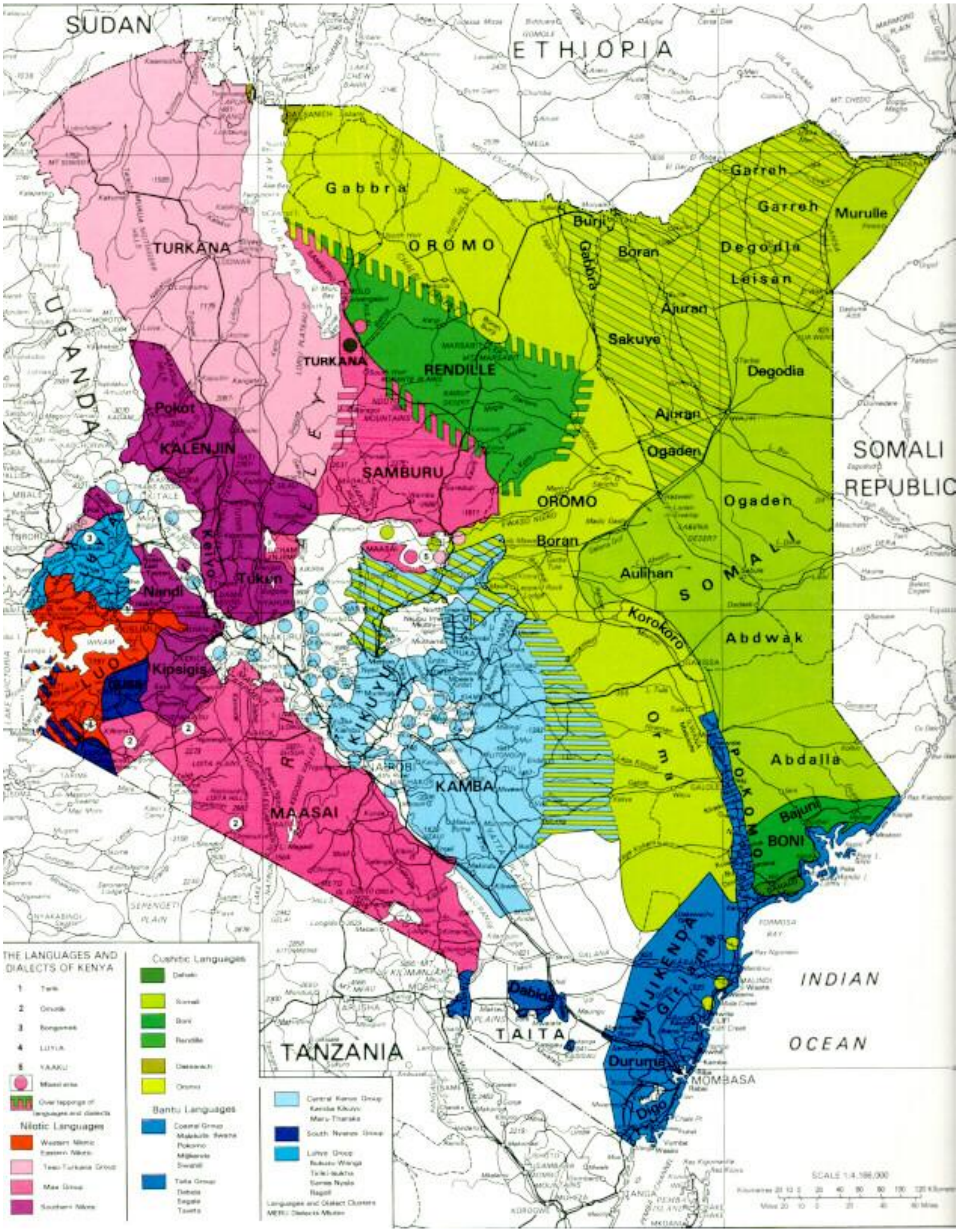

Figure C: Map of Kenyan Languages and Ethnicities (www, Wordpress, 1, 2010).

Kenyan languages and ethnicities As the map above shows in Figure C, Kenya holds many different ethnic groups like Kikuyu, Luhya, Luo, Kamba, Kalenjin and Masaai (www, Britannica, 1, 2010). The official languages are Swahili and English but there are many more. The "African peoples of Kenya" are divided into three language groups: Bantu, Nilo-Saharan, and Afro-Asiatic (www, Britannica, 1, 2010). The Bantu is the largest group and the speakers are mainly concentrated in the southern third of the country. For example Kikuyu, Kamba, Meru, and Nyika people live in the Central Rift Highlands, and the Luhya and Gusii live in the Lake Victoria basin district.

The Nilo-Saharan is the second largest group and consists of people that speak Luo, Masaai, Samburo, and Turkana and more. The rural Luo live in lower parts of the western plateau. The Masaai live as nomads in the southern part of Kenya and in the arid northwest the Samburos and Turkanas also live as nomads.

The Afro-Asiatic group is the very smallest group and inhibits Somali people that border Somalia and Oromos' that borders Ethiopia (www, Britannica, 2010). The Somali and Oromo live in the arid and semiarid regions in the north and northeast. The dry paves for droughts, famines and desertification.

Religion Kenya also holds several different religions Christianity (Roman Catholic, Protestant, and other Christians), Islam, and also traditional beliefs (www, Britannica, 2010). The Christianity has turned up and disappeared a few times Kenya. In the 15^{th} century the Portuguese brought the Christianity that existed until the 17^{th} century. In the end of the 19^{th} century it came back and today two thirds of the people are Christian in Kenya. The traditional African beliefs are many and have many different names. Some of the traditional beliefs have been mixed with Christianity. Muslims are a minority in Kenya and mostly lives in the coastal area (Pers. Com., Nilsson, 2010). There are both Sunni and Shiites Muslims in Kenya. There are also small groups of Jews, Jains, Sikhs, Baha'is in Kenya (www, Britannica, 2010).

Climate The dry season runs from December to March. North of the equator the winds come from northeast and south of the equator southeast winds dominate during the dry seasons. The rainy season starts late March and continues until late May (www, Britannica, 1, 2010). During the dry season the air flowing from the east in both hemispheres.

The rainfall is different for the different regions (www, Britannica, 1, 2010). The annual precipitation is about 1000 millimeters (mm) (40 inches) in the lake Victoria basin district (lakeshore). The lakeshore expects 500-900 mm yearly and is thereby good for agricultural purposes. The maximum daily temperature in the lakeshore region is 27°C (80°F) in July and 32°C (90°F) in October and February.

In the eastern highlands the yearly precipitation is 1800 mm (70 inches) (www, Britannica, 1, 2010). In the Rift Valley the temperature varies, in the north the average is 29°C (84°F) and around Lake Nakuro and Lake Naivasha the temperature is 16°C (61°F). The floor of the Rift Valley is dry but the highland areas receive 760 mm (30 inches) on a yearly basis. The annual rain perception in combination with good fertile soils of the Mau Escarpment area makes a strong agricultural region.

The eastern plateau region together with the semiarid and arid regions of northern, northeastern, and southern Kenya is all dry regions and have high temperatures with yearly averages of 29°C (85°F) (www, Britannica, 1, 2010). All of them except the eastern plateau are also very erratic. The yearly rainfall is 500-760 mm (20-30 inches) in the eastern plateau, 250 mm (10 inches) in the north, and 500 mm (20 inches) in the south.

The coastal area is humid year-round and the average temperature goes above 27°C (80°F) (www, Britannica, 1, 2010). The very coast receives 760-1,270 mm a year (30-50 inches) but it decreases westwards to 500 mm (20 inches) a year. The southern part of the coast is the only suitable for agriculture.

History Kenya is already mentioned in the old testament of the bible (Insight Guides, 2007). Then the Egyptians explored Kenya (mostly the coastal strip around Mombasa). Nacho, the last of the Egyptian pharaohs visited Mombasa 600 BC. Already before Christ Mombasa and Malindi were important trade centers. The coast of Tanzania and Kenya were rich of exclusive goods like gold (one of the most important commodities in the rich Mediterranean region), ivory and leopard skin (Firestone *et al*., 2009). It was mostly Arab navigators that crossed the Kenyan coast and the Swahili language which is a hybrid of Arabic grew in the area (Insight Guides, 2007).

1400 – 1800 After the prophet Mohammed the Kenyan coastal region reached its golden age and flourished through Arab immigrants (Firestone *et al.*, 2009). Up to 1450 the Islamic world was the only external influence in the sub-Saharan Africa. Towards the end of the 15th century the Portuguese came with a demand for slaves and the peaceful situation changed to exploration and conquest times (Insight Guides, 2007). The Portuguese justified their terror in the regions trough a Christian against Islam (Firestone *et al.*, 2009). The Arabs were skilled merchants and returned to the region and the Portuguese left (Insight Guides, 2007).

Victims of the European Colonial Era The Berlin Conference in 1884 decided upon the African future without any African leaders (Firestone *et al.*, 2009). In the late 19th century both Germany and Britain were in the region of Kenya, Tanzania and Zanzibar. In 1885 Germany established a protectorate over the sultan of Zanzibar's coastal possessions. In 1888 the region developed to be the British East Africa Company (BEAC), a trade region. Due to wars with the Maasai people the British influence was concentrated in the coastal area. By successfully negotiate a treaty with the Maasai the Brits were able to build a railway from Mombasa to Uganda which also gave them power and made it possible to restrict the Maasai people to designated reserves. Before WWI the British settlers set up large agricultural farms in the highlands and made profits out of the colony for the first time and spurred other Europeans to follow. War veterans were offered subsidized land in the highlands around Nairobi, which increased the white population in Kenya from 9,000 in 1920 to 80,000 in 1950. In 1920 Kenya was transformed into a colony controlled by the British government (a Crown Colony) where the Africans were excluded from political power until 1944. This upset the Kikuyu tribe and that founded the Young Kikuyu Association that later transformed to the Kenya African Union (KAU). The KAU demanded access to white-owned land. In the end of the 1920s Johnstone Kamau, also known as Jomo Kenyatta, left Kenya for Russia and got in contact with Russian and Indian communists and started to build up the Pan-African Federation with the future president of Malawi and the future president of Ghana.

WWII In 1941 Britain needed money for the WWII and Winston Churchill plead for American aid (Firestone *et al.*, 2009). President Roosevelt demanded a clause called the Atlantic Charter, which stated self-determination for all British colonies after the WWII. In 1946 after the sixth Pan-African Congress Kenyatta returned to Kenya and became one of the leaders of KAU. Ghana became the first independent African country in 1951. This led to disturbances in Kenya and the KAU became divided into radical guerilla groups that threatened farmers and the colonial population. The years between 1948 and 1952 were violent and in 1952 the UK declared Kenya a state of emergency. The same year Kenyatta ended up in jail for masterminding a plot against the UK. Kenyatta was freed in 1959 and the following year the British government announced to transfer Kenya into a democratically elected African government. Kenya became independent in 1963 and Kenyatta became the first President leading the Kenya African National Union (KANU) party.

Independence and Post Colonial Era The first period of the postcolonial era was optimistic (Firestone *et al.,* 2009). Kenyatta wanted the whites together with the Africans to work for and benefit Kenya. The Kenyatta regime failed due to poor relevance for the average Kenyan. The political and economical landscape was poorly developed which led to tribal dissensions. This resulted in huge problems with corruption at all levels in the society and the political system broke down in 1966 and Kenya became a one party state. In 1978 Daniel arap Moi took over the power and is considered to be one of the ‘Big Men’ of Africa ruling Kenya for 25 years. Moi also made Kenya his ‘personal state’. In 1992 the financial situation for Moi and Kenya was very difficult and Moi was forced to hold multi-party elections to get grants from outside Kenya. His power is weakened although he wins the 1992 and 1997 elections.

The Rise of Democratic Voices (1990s-2000s) The National Alliance Rainbow Coalition (NARC) is founded by the twelve opposition groups that lost in the 1992 and 1997 elections (Firestone *et al.*, 2009). In 2002 NARC receives 62 percent of the vote and Moi retires and the 30th of December 2002 Mwai Kibaki becomes the third Kenyan President. Kibaki and the new government were popular outside Kenya and received high grants to eradicate corruption and change policies, and the anticorruption institution ‘czar’ was established. Already in mid-2004 the battle against corruption was lost. Kibaki had many officials from the Moi era in his government and it was clear that they were part of the extended corruption. The highly spread corrupted system led to new elections in 2005 where Kibaki continued to hold political power.

Riots On the 27th of December 2007 Kenya held presidential, parliamentary and local elections, which led to a wave of violence across Kenya due to electoral rigging in the presidential election (Firestone *et al.*, 2009). Kibaki was announced to be the winner but both Kenyan and international election observers disagreed to the result. The violence escalated and exploded in ethnic confrontations. Over 1 000 people died and 600,000 became homeless. Kofi Annan and a panel of ‘Eminent African Persons’ were put together to mediate talks between the different ethnic groups in Kenya. The 28th of February 2008 a power sharing agreement was signed that established a prime ministerial position for the coalition (the opposition). The prime minister can only be fired by the parliament and not the president alone. The agreement also gave cabinet posts to the parties’ representation in parliament. In 2009 and 2010 land tenure reform, judicial reform and poverty and equality reforms are being developed and voted upon.

Corruption Kenya is one of the most corrupted countries in the world (Transparency International, 2009; Pers. Com., Zetterberg, 2010). Kenya also lacks in political freedom (www, Freedom House, 1, 2011; Pers. Com., Zetterberg, 2010) Freedom House is an organization that yearly rates freedom in different countries all over the world (www, Freedom House, 1, 2011; Pers. Com., Zetterberg, 2010). The following figure illustrates the level of freedom, political rights and civil liberties over time where 1 is the highest level and 7 is the lowest (Figure D).

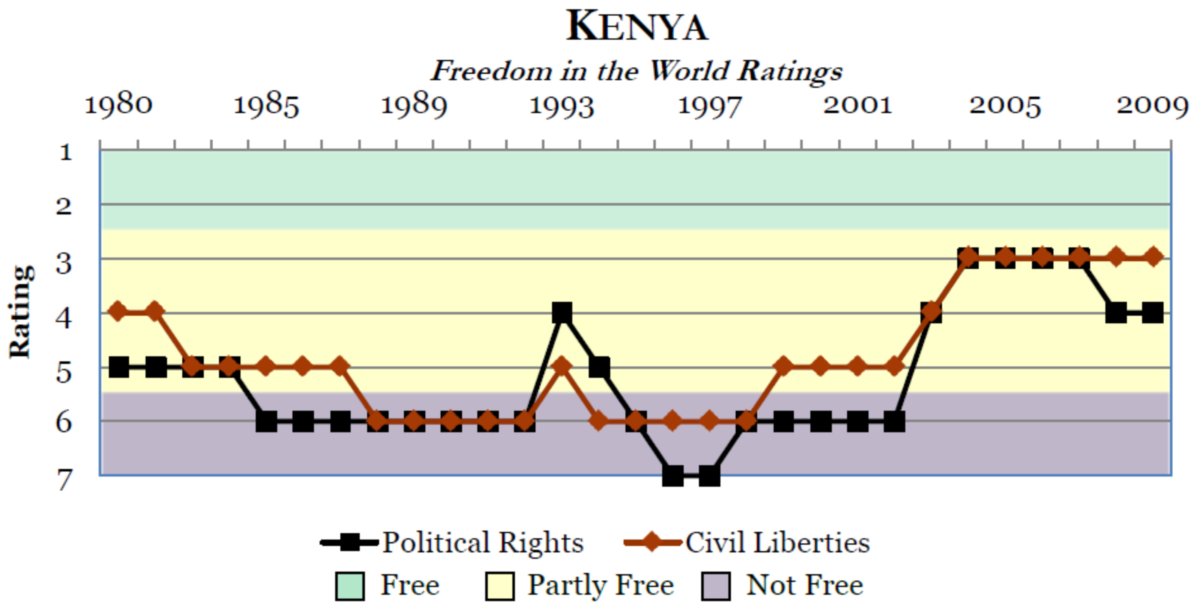

Figure D: The level of freedom in Kenya over time (Freedom House, 2009).

The definition of a free country according to Freedom House is *"where there is a broad scope for open political competition, a climate of respect for civil liberties, significant independent civic life, and independent media"* (Freedom House, 2009, p. 3). In a partly free country *"there is limited respect for political rights and civic liberties. Partly free states frequently suffer from endemic corruption, weak rule of law, and ethnic or religious strife, and they often feature a single political party that enjoys dominance despite a façade of limited pluralism"* (Freedom House, 2009, p. 3). In a not free country *"basic political rights are absent, and basic civil liberties are widely and systematically denied"* (Freedom House, 2009, p. 3). As Figure D illustrates Kenya has become a more free country after Moi's withdraw in 2002 (Firestone *et al.*, 2009). The struggles that followed the election in 2007 limited the political rights.

The following table (Table A) shows short facts and key figures about Kenya.

Table A, Short facts and key figures of Kenya (www, UNDATA, 1, 2010)

Region:	Eastern Africa
Capital:	Nairobi
Currency:	Kenyan Shilling (KES)
Official languages:	Swahili and English
Surface area:	580,367 square kilometers
Population:	38,765,000 (2008)
Population density:	66.8 per square kilometer (2008)
Largest urban agglomeration:	Nairobi 3,010,000
United Nations membership:	16 December 1963
Rainfall, total mean:	1024 millimeters
Temperature, mean (min/max):	12.0/23.4 °C
Seats held by women in national parliaments 2009:	9.8 percents
Education:	
Government expenditure 2005-2008:	7.0 percent of GDP
Primary-secondary gross enrolment ratio (w/m per 100) 2005-2008: 85.0/88.7	
Female third-level students 2005-2008:	36.3 percent of total
Population:	
Life expectancy at birth (w/m) 2005-2010:	54.5/53.7 years
Population growth rate 2005-2010:	2.6 avg. annual percent
Urban population growth rate 2005-2010:	4.0 avg. annual percent
Rural population growth rate 2005-2010:	2.3 avg. annual percent
Urban population:	21.3 percent (2007)
Population aged 0-14 years:	42.8 percent (2009)
Population aged 60+ years (w/m):	4.4/3.8 percent of total (2009)
Major trading partners (percent of exports):	Uganda (12.3), United Kingdom (11.0), United Rep. Tanzania (8.5) in 2008
Major trading partners (percent of imports):	United Arab Emirates (14.9), India (11.8), China (8.4) in 2008
Agricultural production index 2008:	134 estimated for 2008 in 2007 (1999-2001=100)
Agricultural production index 2005:	115 (1999-2001=100)
Agricultural production index 2000:	94 (1999-2001=100)
Food production index 2008:	136 estimated for 2008 in 2007 (1999-2001=100)
Food production index 2005:	115 (1999-2001=100)
Food production index 2000:	93 (1999-2001=100)
GNI[7] per capita 2008:	783.4 current US$
GNI per capita 2005:	524.2 current US$
GNI per capita 2000:	399.1 current US$
GDP[8] per capita 2008:	788.1 current US$
GDP per capita 2005:	527.2 current US$
GDP per capita 2000:	403.3 current US$
Forested area:	6.2 percent of land area (2007)
CO_2 emission estimates:	12,143,000 metric tons/0.3 metric tons per capita

[7] Gross National Income
[8] Gross Domestic Product

Appendix 4, Mango and mango production

There are two different mango races, one from Southeast Asia and one from India and there are several cultivars (Griesbach, 2003). The production in Kenya is mainly based on seven different cultivars (Njuguna *et al.,* 2009). The cultivars differ considerably in size, shape and internal characteristics (Griesbach, 2003). The size of the fruits varies from 2,5-30 centimeters and the weight could be from 200 grams to more than 2,000 grams. The fruit quality depends on sweetness, amount of turpentine taste and fibers.

The mango plant is evergreen and can develop into giant trees with deep root systems (Griesbach, 2003). Grafted trees reach about 10 meters in height while seedlings trees can be the double size. Propagation is done vegetative or by seed. Mango trees are long lived and can produce fruit at the age of 150 years. The tree flushes two or three times a year and new leaves are produced. The leaves can measure more than 30 centimeters in length. Mangos in Kenya flower from late July to early November and the flowers are pinkish or greenish-white. Very high humidity or frequent rains during the flowering damages the produce.

Mango can be grown on many different kinds of soil (Griesbach, 2003). Essential conditions for a successful production are rainfall of 500-1000 mm per year, deep soils (> 3 meters), an altitude of 0-1200 meters, pH value of between 5,5 and 7,5 and good drainage. Other very important factors affecting the production are a dry period during the time of flowering and enough heat when the fruit is ripening. The ideal temperature is between 20 and 26°C. The seedlings start to bear fruit within 4-7 years. Mangos are considered to be drought resistant to some extent but irrigation does improve yield and quality (Fivaz, 2009). Irrigation during the first years increases the growth but when the trees start to produce fruit irrigation is stopped (Griesbach, 2003). Nitrogen is the most important fertilizer but potassium is needed as well (Fivaz, 2009).

Mangos have relatively few problems with diseases and pests but the mango fruit-fly and the mango seed weevil are noxious insects that occur (Griesbach, 2003). Mango fruit-flies attack ripening mangos and cause yield losses. The mango weevil do not damage the fruit but fruits attacked by the seed weevil cannot be exported due to regulations. Anthracnose and powdery mildew are the most common diseases of mango and are both caused by fungus. Infections can result in large and even complete yield losses. Spraying the trees with different chemicals can treat both diseases.

Mangos are harvested at various stages of physiological maturity depending on the prevailing conditions and the purpose of the production (Fivaz, 2009). The fruits are fragile and must be handled very carefully during and after harvest (Griesbach, 2003). Picked mangos are placed into clean plastic or wooden containers to avoid physical damages. If the fruits cannot be transported immediately they must be kept in a sheltered place. Mangos are available from November to April in Kenya, sometimes there are mangos until July.

The mango contains many essential minerals and almost all the known vitamins (Griesbach, 2003). One fruit can provide a large share of daily human requirements of vitamins and minerals and the protein content is higher than that of most other fruits. Mangos also contain iron, calcium, thiamin and niacin.