The identification of South African export opportunities: special reference of fruit juice to Oman and Qatar

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Key words: Decision Support Model, export potential, market selection, Middle East, and product selection.

ABSTRACT

As part of the Accelerated Shared Growth Initiative of South Africa (AsgiSA), the South African government is focusing on improving the country's export performance (Department of Trade and Industry, 2006a). One of the objectives of the Department of Trade and Industry (DTI) is to increase the level of South African exports through the development and implementation of strategies for targeted markets. The DTI commissioned a study to scientifically identify priority products and markets in order to justify its export promotion activities and to ensure that government resources are effectively allocated. This led to the development of the Decision Support Model (DSM) by Viviers and Pearson (2007) as an instrument to identify realistic export opportunities for South Africa.

The Viviers and Pearson (2007) study adapted and refined the methodology of Cuyvers *et al.* (1995) to the South African circumstances and used a sequential filtering process to identify realistic product/market export combinations for South Africa. The outcome of the DSM for South Africa was 9690 SITC product/market opportunities in seventy-four countries, clustered in twelve geographic regions. One of these regions was the Middle East. The DTI indicated the need for a study on South Africa's export opportunities to the Middle East as a result of their prioritisation of regions for export promotion. This need is therefore the rationale of this study. The research objectives were to analyse the identified Middle East countries and determine the product with the most realistic export opportunities to two of the Middle East countries and lastly, to develop a market profile to assist the DTI in promoting the exports of this product to these countries.

In this study, several methods of product and market selection were investigated in order to determine the most suitable method to identify the product/market opportunities from the DSM to the Middle East. The product selection method selected involved a three-phase filtering process to determine the product with the highest export potential to the Middle East. The analysis was based on a cluster-selection process. It was determined that fruit juice was the product with the highest export potential to the region. The market selection process used a composite market potential index to determine which country in the Middle East had the highest

potential for exports of fruit juice from South Africa. The two countries in the Middle East with the highest potential to import fruit juice from South Africa were Oman and Qatar.

A market profile for the export of fruit juice to Oman and Qatar was developed. The market profile provided an economic overview of the two markets, analysed the market potential of fruit juice and provided technical information regarding the requirements for the export of fruit juice by South Africa to Oman and Qatar. The results of this study firstly indicate to the DTI and exporters that South Africa should export fruit juice to Oman and Qatar and secondly presents a market profile with detailed information of the process to follow in exporting fruit juice to these countries.

Sleutelwoorde: Decision Support Model, markkeuse, Midde-Ooste, produkkeuse, en uitvoerpotensiaal.

OPSOMMING

As deel van die 'Accelerated Shared Growth Initiative' (AsgiSA), fokus die Suid-Afrikaanse regering op die verbetering van die land se uitvoerprestasie (Department of Trade and Industry, 2006a). Een van die doelwitte van die Departement van Handel en Nywerheid (DHN) is om die vlak van Suid Afrika se uitvoer te verhoog deur die ontwikkeling en implementering van strategieë vir teikenprodukte en -markte. Die DHN het 'n studie laat onderneem om prioritietsprodukte en -markte wetenskaplik te identifiseer ten einde die DHN se uitvoerbevordeingsaktiwiteite wetenskaplik te regverdig en daardeur te verseker dat die toedeling van die regering se hulpbronne effektief plaasvind. Hierdie opdrag het tot die ontwikkeling van die 'Decision Support Model' (DSM)) van Viviers en Pearson (2007) gelei, as 'n instrument om realistiese uitvoergeleenthede vir Suid-Afrika te identifiseer.

Die Viviers en Pearson-studie (2007) het die metodologie van Cuyvers *et al.* (1995) by die Suid-Afrikaanse handlesomstandighede aangepas en verfyn. Dié metodologie van die DSM behels 'n opeenvolgende filterproses om realistiese produk/markkombinasies vir uitvoer te bepaal. Die uitkomste van die DSM was 9690 SITC produk/ markgeleenthede na 74 lande, wat in twaalf geografiese streke gegroepeer is. Een van hierdie groeperings was die Midde-Ooste. Die DHN het die noodsaaklikheid van 'n studie van Suid-Afrikaanse uitvoergeleenthede na die Midde-Ooste aangetoon as gevolg van hul die prioritisering van die streke vir uitvoerbevordering. Hierdie noodsaak is gevolglik die motivering vir die studie. Die studie se doelstellings was om die Midde-Oosterse lande te analiseer, die produk met die mees realistiese uitvoergeleenthede na twee Midde-Oosterse lande te identifiseer en om laastens 'n markprofiel te ontwikkel om die DHN in die bevordering van uitvoer van die produk na die twee lande te bevorder.

In hierdie studie word 'n aantal produk- en markkeuse-metodes ondersoek om die mees toepaslike wyse vir produk/markgeleenthede vir uitvoer na die Midde-Ooste te analiseer. Die produkkeuse-metode het 'n drie-fase filterproses behels om die produk met die hoogste uitvoerpotensiaal na die Midde-Ooste te bepaal. Die analise was gebaseer op 'n 'cluster'-gebaseerde keuringsmetode. Uit die analise is bevind dat vrugtesap dié produk is met die hoogste uitvoerpotensiaal na die Midde-Ooste. Die markkeuse-proses het gebruik gemaak van 'n saamgestelde markpotensiaalindeks om dié land in die Midde-Ooste met die hoogste potensiaal

vir invoer van vrugtesap te bepaal. Die twee lande in die Midde-Ooste met die hoogste potensiaal vir die invoer van vrugtesap is Oman en Qatar.

'n Markprofiel vir die uitvoer van vrugtesap na Oman en Qatar is ontwikkel. Die markprofiel bevat 'n ekonomiese oorsig van elke mark, 'n analise van die markpotensiaal van vrugtesap in elke mark en verskaf ook tegniese inligting oor die vereistes vir die uitvoer van vrugtesap van Suid-Afrika na Oman en Qatar. Die resultate van die studie toon eerstens aan die DHN en uitvoerders dat Suid-Afrika vrugtesap na Oman en Qatar moet uitvoer en tweedens verskaf die markprofiel, gedetailleerde inligting oor hoe om vrugtesap na die twee lande uit te voer.

ABBREVIATIONS

AGEG	Arabian Gulf Export Group
AsgiSA	Accelerated Shared Growth Initiative of South Africa
DSM	Decision Support Model
DTI	Department of Trade and Industry
ESCWA	Economic and Social Commission for Western Asia
GAFTA	Greater Arab Free Trade Area
GCC	Gulf Cooperation Council
GSO	Gulf Standards Organisation
HS	Harmonized System
IMF	International Monetary Fund
ITC	International Trade Centre
ITRISA	International Trade Institute of Southern Africa
L/C	Letter of Credit
MFN	Most Favoured Nation
MOCI	Ministry of Commerce and Industry
n.e.s.	Not elsewhere specified
NIPF	National Industrial Policy Framework
OMR	Omani Rial
QAR	Qatari Rial
RCA	Revealed Comparative Advantage
SABS	South African Bureau of Standards
SITC	Standard International Trade Classification
TPI	Trade Performance Index
TISA	Trade and Investment South Africa
UAE	United Arab Emirates
UNSD	United Nations Statistics Division
USD	United States Dollar

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1. INTRODUCTION TO STUDY

1.1 Introduction

This chapter provides the background to and problem statement for the problem under investigation. Thereafter, the research questions and objectives in response to the problem statement are given. The research methodology is also sketched, and the chapters of the dissertation are outlined.

1.2 Background

The Accelerated and Shared Growth Initiative of South Africa (AsgiSA) is an initiative through which the South African government was mandated to halve poverty and unemployment by 2014. The global economic strategy within AsgiSA focuses on improving the country's export performance by dismantling the barriers to trade and gaining increased market access (Department of Trade and Industry, 2006a:5–13). The National Industrial Policy Framework (NIPF) was developed as a policy document to play a role in achieving the AsgiSA goals. The primary objective of the NIPF was setting out Government's policy approach to the industrial development of the South African economy. The NIPF will serve as a blue print for South Africa's industrialisation process while adopting the same methodological approach as AsgiSA (Department of Trade and Industry, 2008:6).

Both AsgiSA and the NIPF established a set of institutional coordination mechanisms that can integrate trade policy into economic development strategy in an operationally meaningful manner. An important objective of the NIPF in terms of trade policy is the improvement of non-traditional export performance, particularly in more sophisticated and value added products. The NIPF also prescribed that the development of more refined foreign direct investment and export promotion strategies is necessary to provide for more targeted investment promotion driven by identified opportunities and more focused export promotion based on detailed analysis of trade opportunities (Department of Trade and Industry, 2008:29).

The Department of Trade and Industry (DTI) is the export promotion authority of South Africa. It has the objectives of promoting the co-ordinated implementation of AsgiSA; promoting direct investment in growth of the industrial and services economy, focusing on the creation of employment; increasing the level of exports and promoting equitable global trade; promoting

broader participation, equity and redress in the economy; and contributing to Africa's development and regional integration within the New Partnership for Africa's Development (Department of Trade and Industry, 2009).

Trade and Investment South Africa (TISA) is a division of the DTI. It has the specific objectives of increasing South Africa's capacity to export by developing and implementing strategies for targeted markets, increasing the level of direct investment flow, and effectively managing the DTI's network of foreign offices (Department of Trade and Industry, 2009:36).

The DTI commissioned a study to scientifically justify the export promotion activities of TISA, particularly in reference to its objective of developing and implementing strategies in targeted markets (Viviers & Pearson, 2007:3). Identifying markets and product opportunities should be based on sound research and analysis (Cuyvers, De Pelsmacker, Rayp & Roozen, 1995). The DTI indicated the need for an extensive study on export promotion in order to ensure that government sources were effectively allocated through the identification of priority markets (Viviers & Pearson, 2007). It was further held that focused export promotion activities could lead to a higher success rate of exporters in foreign markets and therefore exacerbate the need for a study to identify priority markets (Viviers & Pearson, 2007).

The Decision Support Model (DSM) of Viviers & Pearson (2007) was developed as a tool to identify realistic export opportunities specifically for South Africa for the DTI. The DSM was to be used to prioritise export assistance to exporters by the DTI and allow exporters to access foreign markets (Viviers & Pearson, 2007). This DSM was adapted from the original DSM of Cuyvers *et al.* (1995) to suit South African trade circumstances. The DSM of Cuyvers *et al.* (1995) suggested a sequential filtering process to identify product/market combinations that present realistic export opportunities. The DSM of Viviers and Pearson (2007) identified realistic export opportunities for South Africa through analysing 238 countries and 623 Standard International Trade Classification (SITC) product categories. The outcome of the filtering process was 9690 SITC-product/market opportunities to seventy-four countries.

The study on which this dissertation reports is based on the results of the DSM of Viviers and Pearson (2007). The next section presents the problem statement and indicates the importance of this study and its contribution to the DSM and the activities of TISA.

1.3 Problem statement

This section presents the problem statement. It thereby indicates the importance of this study in light of the objectives and activities of TISA. Furthermore, this section demonstrates this study's contribution to the results of the DSM.

One of the critical outcomes of the DSM was that it provided twelve geographical clusters for countries with high export potential, namely Africa, Asia, Western Europe, Middle Europe, Eastern Europe, Scandinavia, the Baltic States, Australasia, North America, South America, the Caribbean and the Middle East (Viviers & Pearson, 2007). These geographical regions were identified by the DSM as regions with high export potential in consultation with the DTI (Viviers & Pearson, 2007). The Middle East was identified by the DSM as a geographic cluster with export potential, with the cluster contributing 911 realistic export opportunities and 9.5 per cent of all realistic export opportunities (Viviers & Pearson, 2007). The Middle East geographical cluster consists of eight countries: Bahrain, Iran, Israel, Kuwait, Oman, Qatar, Saudi Arabia and the United Arab Emirates (UAE).

In order to meet its objective of developing and implementing strategies in targeted markets, TISA introduced the Arabian Gulf Export Group (AGEG). The four objectives of the AGEG are to raise awareness amongst South Africans of the opportunities in the Gulf (Middle East) region, promote the South African brand, facilitate market entry and exports for South African exporters, and facilitate foreign direct investment (Department of Trade and Industry, 2006b). The introduction of the AGEG indicates the importance of the Middle East region to the DTI as a target market for both exports and investments. Therefore, the DTI would benefit from a focused study for exporters wishing to export to the Middle East.

Cuyvers *et al.* (1995:173–174) suggests that identifying a limited list of export promotion priorities and prioritising target markets would strengthen the export strategy of a government export promotion department, leading to the most effective allocation of limited government resources. The identification of the Middle East as one of the geographical clusters in the DSM and the requirements of the AGEG clearly indicate that there is a need for a focused study on the Middle East. The DSM results for the Middle East indicated a large number of realistic export opportunities and the objective of the AGEG to facilitate market entry and exports for South African exporters would only be achieved were the results of the DSM to be narrowed down to determine a focused strategy for the Middle East. The product/market opportunities identified in

the Middle East by the DSM thus need to be translated into meaningful product-specific market profiles. These market profiles should provide information to both exporters and TISA on the potential of a specific product in the Middle Eastern market and give insight into the technical requirements of the markets for South African exporters. The next section provides further motivation as to the importance of developing product-specific market profiles for the Middle East.

1.4 Rationale for study

This section provides the rationale for this study regarding the importance of developing product-specific market profiles in the Middle East. It considers South Africa's trade structure and performance, as well as the attractiveness of the Middle East as an export destination for South African exporters.

1.4.1 South Africa's trade structure and performance

This section analyses South Africa's trade structure and performance in order to indicate the importance of a focused export strategy that identifies priority markets. The trade relationship between South Africa and the Middle East is analysed and the implications of the trade relationship for the strategic objectives of the South African government are discussed.

The increase in the South African current account deficit since 2003 poses a threat to the AsgiSA objectives of halving poverty and achieving economic growth and the NIPF objective of industrial development. The deficit exceeded 7 per cent of GDP in 2007 and 2008, reaching R146 billion and R169 billion, respectively (SARB, 2009). The global economic strategy of AsgiSA focuses on improving the country's export performance and therefore it is necessary to determine the drivers of the increasing current account deficit and improve efforts to increase exports.

In 2008, South Africa's top import was crude petroleum oils, which amounted to USD15 billion, (United States Dollar) showing an increase of 36.3 per cent from USD11 billion in 2007. Imports of crude petroleum oil accounted for 17.1 per cent of total imports in 2008. These imports primarily originated from the Middle East, particularly from Saudi Arabia with crude petroleum oil imports at USD4.3 billion in 2008, showing an increase of 48.8 per cent from USD2.9 billion in 2007 (Trade Map, 2009). Rising import figures can be attributed to oil prices in 2008 reaching

record levels of USD91.48 per blue barrel (Inflationdata, 2009). Therefore, the main driver of the increasing current account deficit is the reliance of South Africa on crude petroleum oil imports. The dependence on imported crude petroleum oils is distorted by the fluctuations in oil prices. This situation places a burden on the South African economy by placing pressure on the current account balance.

The pressure on the South African economy to increase export performance is compounded by the structure of exports, limited export market diversification and focus on traditional export markets. In 2008, South Africa's top export destinations were Japan (USD8.1 billion), the United States (USD7.9 billion), Germany (USD5.7 billion), the United Kingdom (USD4.9 billion), and China (USD4.3 billion; Trade Map, 2009). South Africa is the most dependant on imports from the Middle East; yet in 2008, South Africa exported USD3 billion to the Middle East and imported USD13 billion from the region (Trade Map, 2009). This is a trade deficit of USD10 billion and an export-to-import ratio of 1:4.3, demonstrating the high level of disparity in the trade relationship between South Africa and the Middle East.

South Africa imported largely from Saudi Arabia (USD5.5 billion) and Iran (USD3.3 billion), while exporting mainly to Israel (USD841 million) and the UAE (USD770 million) in 2008. South Africa mainly exported diamonds (USD456 million), coal (USD450 million) and cars (USD335 million) to the Middle East (Trade Map, 2009). Therefore, it is evident that South Africa's trade structure with the Middle East requires attention and the development of a focused strategy to improve exports to the region is important. The next section examines the attractiveness of the Middle East as an export destination for South African exporters.

1.4.2 Attractiveness of the Middle East as an export destination

The Arab World Competitiveness Report of 2007 holds that the Middle East has had high rates of growth for four consecutive years. Recent reforms have contributed to high growth rates, but the region has yet to reach its full potential (World Economic Forum, 2007). For South African exporters, the economic growth in these countries means that buyers will have a larger income and an appetite for imported goods. Saxena (2007:45) holds that the dynamic and viable trading environment is a factor attracting business to the region, particularly through the Jebel Ali Free Zone in Dubai, which attracts investors and commercial businesses from around the world as it allows exemption from import, export, and personal tax. South Africa could use this new

emerging market to its advantage to increase exports to the region, and to explore Dubai as a trading hub.

Jones (2003:360–361) states that the Middle East countries have been described as some of the most exciting emerging retail markets, with consumers having higher disposable income. The UAE and Bahrain are competing to become regional business hubs and Bahrain is known as the freest economy in the region. Jones also points out that the Middle East and North African region is ranked the fastest growing economy behind China and India. The Gulf Cooperation Council (GCC) is described by Metwally and Tamaschke (2001:292), as a financially powerful political and economic union amongst Bahrain, Kuwait, Oman, Saudi Arabia, and the UAE. The GCC countries import most of their consumer and capital goods, owing to their limited domestic productive capacity and do not impose any significant import restrictions. This situation creates a clear and open market for South African exports and the opportunity to become a competitor in these markets, therefore it is vital that South African exporters be prepared to take advantage of the export opportunities that may arise from this market.

From this section, it is evident that South Africa needs to develop a focused export strategy for the Middle East in order to insulate the South African economy from the price fluctuation shocks resulting from its dependence on crude petroleum oils from the region (see Section 1.4.1). Apart from the need to protect the South African economy, the Middle East has been identified by the DSM as a region holding export potential. Moreover, the Middle East is regarded as an attractive region for trade owing to its economic growth and potential for exporters and investors. Therefore, it is evident that a focused study on the Middle East is required in order to determine the opportunities of this market for South African exporters.

The rationale for the study and the problem statement elicited questions to be addressed in this study. These research questions are presented in the next section.

1.5 Research questions

The research questions of this study are:

- Which product, based on the DSM, holds the most export potential to the Middle East?
- Which market in the Middle East, based on the DSM, has the most export potential for the identified product?

- Within the identified Middle Eastern countries:
    - what is the feasibility of the markets given their economic structures; provide an economic overview of each market;
    - what is the demand for the identified product in each market; and
    - what technical information for South African exporters is needed in order to enter each market?

Based on these research questions, research objectives that guided the study were derived. These research objectives are given in the next section.

1.6 Research objectives

The objectives of this study are:

- to identify the product from the DSM that holds the most export potential to the Middle East,
- to determine the market[1] in the Middle East from the DSM that has the most export potential for the identified product, and
- to develop a product-specific market profile for the identified Middle East countries that will:
    - provide an economic overview of each market;
    - analyse the demand for the identified product in each market; and
    - provide technical information for South African exporters in order to enter each market.

Therefore, this study has three research objectives: the identification of a product with the highest export potential to the Middle East, the identification of the market with the highest export potential of that product, and the development of a market profile. The next section outlines the research methodology followed in this study in order to achieve the research objectives.

[1] Within this study all references to market will pertain to a specific country, for example, a country in the Middle East.

1.7 Research methodology

The research methodology involved secondary desk research that included a literature review and empirical study to determine the products and markets from the DSM with the most export potential in the Middle East.

For the literature review, various academic articles and journals were examined. The results of this review will be provided in Chapter 2 and will focus on product and market selection methods. The literature review will discuss the requirements of effective product and market selection and provide an overview of the most common product and market selection methods. Specific attention will be given to the geographic clustering of markets and analysing the export potential of a region in order to ensure that the empirical study meets the requirements of a geographic cluster. The most suitable indicators for product and market selection were determined, which were then used in the empirical study.

The results of the empirical study will be presented in Chapters 3 and 4. In Chapter 3, the potential products for export to the Middle East will be determined. In Chapter 4, the Middle Eastern market with the most export potential of the identified product will be determined. The empirical study primarily used Web-based sources, such as Trade Map and Market Access Map. The empirical analysis required analysis of trade data using SITC codes and HS (Harmonized System) codes. In Chapter 3, the SITC codes will be translated into HS codes using United Nations Statistics Division (UNSD) data.

The market profiles of Chapter 5 will provide an economic overview of the market, an analysis of the market potential of the identified product in each market, and technical information on each market. The economic overview will provide information on the suitability of the markets using macroeconomic indicators. The market potential of the identified product in the market was determined by analysing the trade statistics of the identified product in each of the markets. The technical information for each market will be a qualitative analysis of the requirements faced by an exporter to enter each market, focusing on tariffs, import requirements and documentation, standards and regulations, price-influencing factors, distribution channels, methods of payment, and the marketing of the product. The information was gathered from various journals, articles and websites.

The next section outlines the study that followed the research methodology specific to the empirical study discussed in this section. The section will indicate the sources and time periods used in the empirical study.

1.8 Demarcation of the study

In this study, the potential of the products and countries identified in the DSM for the Middle East as realistic export opportunities was analysed. The countries are those identified in the DSM as Middle Eastern countries, i.e. Bahrain, Israel, Iran, Kuwait, Oman, Qatar, Saudi Arabia and the UAE. This study focuses on those product/market combinations identified in the DSM in order to determine the product/market combination with the most export potential to the Middle East.

The trade data in Chapters 3 and 4 were sourced from Trade Map (which is a database of trade indicators from the International Trade Centre; ITC) and the analysis of the trade data was for the period of 2004 to 2008. This is also the five-year period for the growth indicators of Trade Map. The macroeconomic data in Chapter 5 was sourced from the International Monetary Fund (IMF) for 2007 to 2013, the trade data from Trade Map for 2008, and the tariff data from Market Access Map.

However, in Section 3.4.2 the trade data will be sourced from Quantec for the period of 1998 to 2008. The reason for this is that Quantec allows the unlimited selection of products, while Trade Map only allows the selection of thirty products. In this section, 387 products were analysed that necessitated the use of a source that was capable of allowing the selection of such a large number of products. The analysis from 1998 to 2008 in this section is because the DSM was developed using import data for the period 2000 to 2002. It was decided to include the additional two years to round off the analysis to a ten-year period.

This study does not consider the development of an export strategy or market entry strategy to the Middle East. The focus was on the identification of opportunities and the creation of a market profile to inform exporters when making a decision regarding the most appropriate market for export.

1.9 Outline of the dissertation

This chapter has provided the background of the study, the problem statement, research questions and research objectives of the study. It has also indicated the research methodology. This section outlines the remaining chapters of the dissertation.

Chapter 2 will present the literature review, which will discuss the methods of determining export opportunities in foreign markets. The chapter will analyse various product and market selection methods with a specific focus on product and market selection within a geographic cluster. The chapter will also determine the most suitable indicators for quantitative product and market selection methods. The importance of information for exporters entering foreign markets and the types of information required by exporters will also be discussed in this chapter.

Chapter 3 will present the first part of the empirical study, focusing on identifying the product with the most export potential to the Middle East from the results of the DSM. The chapter will approach the selection process using a filtering process in three phases. An index for export potential will be used as part of the final selection to identify the product with the most export potential to the Middle East.

Chapter 4 will present the second part of the empirical study, focusing on identifying the market with the most export potential to the Middle East for the product identified in Chapter 3. The chapter will study the Middle East markets identified as potential markets in the DSM. A market potential index will be used to determine the market with the most export potential.

Chapter 5 will provide product-specific market profiles for the two most attractive markets from the analysis in Chapter 4. The market profiles will provide an economic overview of the market, analyse the market potential of the identified product in each market, and provide the technical information on each market required by an exporter in order to make an informed decision to enter the market.

Chapter 6 will provide a summary of the dissertation and will outline the main findings of the study. The limitations to the study will also be discussed in this chapter, and recommendations for further research made.

2. DETERMINING EXPORT OPPORTUNITIES IN FOREIGN MARKETS

2.1 Introduction

This chapter presents a literature review of product and market selection processes to identify export opportunities in foreign markets. The most common product and market selection methods are discussed and the requirements for effective product and market selection are identified. There is a specific focus on the selection process within a geographic cluster in order to ensure that the export opportunities in the Middle East are evaluated efficiently. The findings of this chapter informed the empirical study, presented in the following chapters.

In the previous chapter, it was indicated that this study developed from the need for a study on the Middle East to determine the export opportunities of South Africa to the region. The Middle East is one of the twelve geographic clusters resulting from the DSM (Viviers & Pearson, 2007), the introduction of the AGEG by the DTI to promote exports to the Middle East, and the current trade relationship between South Africa and the Middle East. The Middle East geographic cluster identified in the DSM consisted of 911 realistic export opportunities in eight countries. The large number of realistic export opportunities to the region needs to be analysed in order to determine the most realistic export opportunities from the results of the DSM, which could be used by the government in promoting exports to the Middle East. This means that the product with the highest export potential to the region first needs to be identified and subsequently the country in the Middle East with the highest export potential for that product needs to be identified. Once the product and market with the highest export potential have been identified, it is necessary to develop a market profile in order to outline the potential and present technical information for exporting the identified product to the identified market.

Therefore, the following sections discuss the pertinent literature regarding product and market selection, geographic clustering in the selection process, the identification of indicators for quantitative product and market selection, and the information requirements of a market profile. As the DTI indicated the need to identify priority markets to inform its national export strategy, it is necessary to discuss the importance of a focused national export strategy before proceeding to discuss the literature of product and market selection. Therefore, the next section discusses the importance of a focused national export strategy.

2.2 The importance of a focused national export strategy

According to Viviers and Pearson (2007), the DTI indicated the need for an extensive study on export promotion to ensure that government sources were effectively allocated through the identification of priority markets, in order to inform its national export strategy. Owing to this need, the DSM of Cuyvers *et al.* (1995) was applied to South African trade data by Viviers and Pearson (2007) in order to identify realistic export opportunities for South Africa. Therefore, it is necessary to discuss the importance of a focused national export strategy and what it would entail.

Almost 90 per cent of export promotion agencies in sub-Saharan Africa have an export promotion strategy as part of their national economic development plan (Lederman, Olarreaga & Payton, 2006:9). South Africa is no different, with AsgiSA focusing on improving the export performance of South Africa as one of its strategies to achieve economic growth (see Section 1.1). Emerging markets such as Brazil, Chile and Mexico implemented export-led economic growth strategies that lead to increased export performance (Aulakh, Kotabe & Teegen, 2000). They also found a positive correlation between export performance and a focused export strategy, demonstrating that the more export performance improved, the more focused the export strategy. As a result of this correlation, Aulakh *et al.* (2000) found that exporters develop their products especially for export markets identified in national export strategies. This means that governments should exercise vigilance and pragmatism when identifying target markets for export as part of their national export strategy. This should be done in close collaboration with the private sector as government cannot promote what private sector cannot deliver.

The information technology (IT) industry in India has become a global leader as a result of the Indian government recognising the export potential of the industry and the development of a focused export strategy for the Indian IT industry. Part of the strategy of the Indian government was the creation of research units to enhance the India's knowledge of the IT industry (Joseph & Harilal, 2001:3263–3264). From the Indian example, it becomes apparent that South Africa should identify clear industries for development and the alignment of trade policy with industrial policy could create an environment for exports for a chosen priority industry. Increased and improved research of priority industries could also enhance South Africa's knowledge of those industries and prepare exporters in those industries.

A national export strategy should encourage the exposure of exporters to foreign markets through export promotion programmes such as trade missions and trade shows (Lederman *et al.*, 2006). In-depth market knowledge is gained by exporters from exposure to foreign markets and allows exporters to formulate an enhanced export strategy based on this primary research (Spence, 2003:83–85). According to Spence, experiential market-specific knowledge is gained as trade fairs allow exporters to display their goods and services in foreign markets and trade missions place exporters into direct contact with local businesses and government representatives.

Apart from the market knowledge gained by the exporters in participating in export promotion programmes, these programmes are considered to be effective in increasing sales (Wilkinson & Brouthers, 2000:726). Export promotion programmes with activities such as trade missions and trade shows would be more effective were they strategically aligned to the industrial policy of the country as the flow of strategic focus is consistent and within the same industry (Wilkinson & Brouthers, 2000:729). It is of little value in instances in which export promotion programmes are directed at industries that have limited supply and/or there is no priority to develop the industry by government (Lederman *et al.*, 2006:7). According to Papadopoulos, Chen and Thomas (2002:185), government export promotion initiatives should be directed towards programmes focusing on specific sectors rather than a generic approach of different industries exploring different markets. Therefore, a focused export strategy is required by government that prioritises markets with export potential, and encourages research into markets and within industries. A national export strategy should not be developed in isolation and should be aligned to and based on industrial policy. This alignment would improve the effectiveness of export promotion programmes and increase exports.

The study does not elaborate on an export strategy of government any further but focuses on the selection of a product and market with the highest export potential with the aim of producing a market profile for this product to an identified market. The next section investigates the methods of selecting of a product with the highest export potential to foreign markets.

2.3 Selecting the product with the highest export potential

This section investigates some of the methods on the selection of products with export potential in a geographic region/cluster. As mentioned in Section 2.1, the Middle East geographic cluster identified in the DSM consisted of 911 realistic export opportunities in eight countries, which

translated into 360 product opportunities to the region. As an export strategy has to be focused, these many product opportunities to the Middle East have to be analysed in order to determine which product has the highest export potential to the region. The findings of this section will be applied in Chapter 3, in which the results of the statistical analysis to identify the product with the highest export potential to the Middle Eastern region will be presented. As the product selection seeks to identify the product with the highest export potential to the Middle East, it is necessary to investigate product selection within a geographic cluster. According to Papadopoulos and Denis (1988:41), market selection within a geographic cluster should be concerned with determining a product's best fit within a cluster and then selecting the best country within that cluster. Therefore, it is essential to identify which product has the best fit within the Middle East before the market with the highest export potential in the region can be identified.

Traditionally, the global market is grouped according to geographic, political, economic, and cultural clusters (Baalbaki & Malhotra, 1993:21) and the Middle East is a suitable example of a market in which all four clusters are applicable. The close geographic proximity of the Middle Eastern countries to one another was the initial reason for clustering the countries together. Furthermore, these countries have similar economic structures, with severe dependence of their economies on the oil industry (see Section 1.4). The region also boasts cultural and religious similarities between the countries. Therefore, the Middle East is a very suitable region for geographic clustering of export potential.

According to Kale and Sudharshan (1987:61–64), clustering is based on the premise that countries are separate yet spatially connected areas wherein consumers share a language, culture and other distinct national characteristics. Kale and Sudharshan suggest that by understanding these similarities a logical framework can be created for the group of countries upon which an export strategy can be formulated. This means that if the similarities between the countries in the Middle East are understood, similarities can be identified and an export strategy can be formulated for the region.

Dividing the globe into geographic clusters allows an exporter to concentrate on a more manageable number of markets and formulate a more effective export strategy (Kale & Sudharshan, 1987:60–61; Day, Fox & Huszagh, 1988:24–26). Targeting a geographic cluster such as the Middle East could increase an exporter's market coverage, as more countries would be reached (Aulakh *et al.*, 2000:350). Focusing on a particular product within the Middle East

geographic cluster could increase export performance of an exporter as the export strategy is targeted to exporting the product to the region and not to a multitude of countries (Aulakh *et al.*, 2000:350). Clearly identifying a product with export potential to a geographic cluster allows an exporter to develop an export strategy specifically for the cluster, increasing the efficacy in the allocation of limited resources in export promotion (Shankarmahesh, Olsen & Honeycutt, 2005:204–207). Therefore, addressing the Middle East as a region and identifying the product with export potential in the region could lead to the formulation of an effective export strategy and optimal allocation of resources.

The identification of similarities across the countries in a cluster and consequently the identification of products with export potential in the cluster would enable exporters to standardise their offerings and marketing strategies across the different countries in the cluster (Day *et al.*, 1988:14–26; Sakarya, Eckman & Hyllegard, 2006:212–213). This approach allows marketers to narrow their focus on the small number of potentially attractive markets with meaningful similarities in the cluster (Sakarya *et al.*, 2006:215–216). Exporters could have substantial cost savings by developing one marketing programme that could be implemented in the countries in the cluster. Such a marketing approach builds brand awareness in the cluster and prevent confusion in the minds of consumers (Aulakh *et al.*, 2000:348). Therefore, approaching the Middle East as a cluster would allow exporters to standardise their offerings and marketing strategies for all the countries in the region. In addition, this would provide cost savings and improve brand awareness of the consumers in the region.

Market clustering is concerned with determining similarities between markets (Kumar, Stam & Joachimsthaler, 1994:31; Shankarmahesh *et al.*, 2005:204–207). Thus, in clustering a group of countries, the primary focus is to identify common needs and group the consumers in the region based on similar needs (Hofstede, Wedel & Steenkamp, 2002:160). Therefore, the demand similarities between the countries in the Middle East have to be determined. Evaluating similarities across the countries in a cluster can lead to the identification of the type of product with the most export potential to the cluster (Day *et al.*, 1988:14–26; Sakarya *et al.*, 2006:212–213). In order to cluster a group of countries successfully, the countries should display the same demand potential for a given product (Sakarya *et al.*, 2006; Shankarmahesh *et al.*, 2005; Papadopoulos & Denis, 1988:39–41). Therefore, a product should have export potential to most of the countries in the Middle East in order to have export potential to the region as a cluster.

The analysis of the similarities in a cluster to determine export potential should exhibit product specificity (Sakarya *et al.*, 2006:212–213). This means that in determining similar demand levels in the cluster, it is crucial to analyse demand for products specifically and not assume a macro-level approach to the analysis (Papadopoulos & Denis, 1988:39–41). Selecting the product is an important part of grouping countries (Baalbaki & Malhotra, 1993:26). Owing to the importance of selecting the best product in the region, the first step in selecting the product with the highest export potential in the Middle East is to identify the products from the results of the DSM with the best fit in the region.

According to Sakarya *et al.* (2006:212–213), ranking countries within clusters may differ depending on whether general or product-specific indicators are used and it is essential that comparability across countries is present. In this study, the requirements of Sakarya *et al.* (2006) were reversed: the products within the Middle East cluster were ranked according to country-specific indicators. Thus, a product/market matrix was tabled that ranks the products according to specific criteria related to the countries in the Middle East, in order to determine the products with the most export potential to the region.

The criteria for a cluster according to Sakarya *et al.* (2006:212–213) is that the countries in the cluster display similar market attractiveness and potential. Therefore, the products in the product/market matrix were ranked according to the results of the DSM of Viviers and Pearson (2007). As the DSM has already determined that there is export potential for the products in each of the Middle Eastern countries, which products are the best fit in the region needs to be determined. Therefore, the first criteria is that the products are ranked according to the number of countries in which they have export potential. The results of this process are given in Chapter 3 in which the products with the highest export potential for the largest number of Middle Eastern countries are identified.

In this section, the methods of selection of a product with the highest export potential to the Middle East have been briefly discussed. The primary focus of the section was the selection of a product within a geographic cluster. The next section examines market selection methods to identify the country in the Middle East with the highest export potential for an identified product.

2.4 Selecting the market with the highest export potential

This section examines market selection methods and identifies the requirements of effective market selection of the countries with the highest export potential in the Middle East for the product identified in Chapter 3. The findings of this section informed the empirical study detailed in Chapter 4 through which the Middle East market with the highest export potential was identified.

The DSM of Viviers and Pearson (2007) identified eight countries in the Middle East with export potential: Bahrain, Iran, Israel, Kuwait, Oman, Qatar, Saudi Arabia and the UAE. Although in Section 2.3 it was determined that a single export strategy could effectively be applied to the Middle East as a region, it is sensible to identify the country in the region with the most export potential in order to develop a focused export strategy for the Middle East. The country identified as having the highest export potential is regarded as the first point of entry into the Middle East and because it has the highest potential it carries the highest success rate relative to the other countries. The next section therefore highlights the importance of effective market selection.

2.4.1 The importance of effective market selection

An export strategy needs to be focused in order to achieve optimal allocation of resources and success in exports, and carefully identifying markets with the highest export potential is principal to an effective export strategy (Shankarmahesh *et al.*, 2005:204–207). Market selection is a critically important part of an export strategy as global markets are becoming more complex and exporters have to evaluate their global strategic position (Papadopoulos *et al.*, 2002:165–166). Establishing strategic export markets can be invaluable to an exporter aspiring to be globally competitive, which highlights the importance of market selection (Papadopoulos & Denis, 1988:38). Furthermore, it was found that exporters experienced export growth in cases in which effective market selection was used and inadequate market selection lead to exporters facing financial losses (Papadopoulos *et al.*, 2002:166), which demonstrates that market selection can affect export performance. Therefore, South African exporters need to understand the necessity for an export strategy that targets markets that are the outcome of careful market selection.

It would be expected that exporters meticulously compile their export strategy, focusing on determining a suitable market for their product and that market selection is conducted

scrupulously. However, many exporters are ill equipped to conduct market selection and have a reactive response to their export strategy purely as a result of irregular orders from foreign buyers (Papadopoulos *et al.*, 2002:166). This approach is not sustainable in the long-term and therefore market selection needs to be practised in order for an exporter to achieve long-term, sustainable export growth.

Market selection is concerned with developing an efficient and effective method that is greatly selective in order to identify the markets with the highest export potential (Papadopoulos & Denis, 1988:38; Cuyvers, 2004:255–256). Thorough analysis of potential export opportunities is important in the market selection process (Cuyvers, 2004:255–256). A number of markets must be compared and it is important that a formalised statistical analysis be conducted to systematically evaluate and select potential foreign market opportunities (Papadopoulos & Denis, 1988:38–39; Kumar *et al.*, 1994:29). The market selection methodology should be inexpensive, easy to understand and apply, and should use a flexible framework to be applied by any user (Kumar *et al.*, 1994:32). Therefore, in selecting the market in the Middle East with the highest export potential for the product in question, one should use selective methodologies that provide a thorough analysis of the potential export opportunities in the Middle Eastern countries. The market selection process should use methods that can easily be applied by South African exporters using available sources of trade information, and allow exporters to adjust the method to be more applicable to their business or industry.

Foreign markets can be evaluated using a qualitative approach or a quantitative/statistical approach. The qualitative approach uses information from industry or country specialists and adopts a subjective approach (Kumar *et al.*, 1994:31). The quantitative approach is compiled from data sources, is a more objective evaluation and can be applied to a large number of markets (Papadopoulos & Denis, 1988:45; Kumar *et al.*, 1994:31). This study adopts a quantitative approach to evaluating markets as a more objective approach is preferred and the data for analysis is easily available from Trade Map. The next section briefly discusses the common market selection methods to identify the best indicators of market selection to be used in the quantitative analysis in Chapter 4.

2.4.2 Market selection methods

The process of evaluating potential foreign markets can be summarised into three stages: screening, identification and selection (Kumar *et al.*, 1994:31; Rahman, 2003:119). In the

screening stage, countries are eliminated on the basis of probability of success using macro-level indicators. In the identification stage industry-specific (or product-specific) information is used to assess the attractiveness of an industry (or product) in each country. In the selection stage, which is sequential, markets are selected based on exporter-specific information and requirements (Kumar *et al.*, 1994:33–34; Rahman, 2003:120).

This study focuses on market identification and selection, as the results of the DSM of Viviers and Pearson (2007) provided the screening stage in which the countries and products with the highest export potential in the Middle East were provided. In this study, the identification of a market with the highest export potential is based on empirical analysis using product-specific information[2]. The selection of a market is based on the requirements of a government export promotion agency (growth and sustainability) and is not specific to any exporter, which include export growth and relatively high export values.

Three basic strategies for the quantitative assessment of markets were identified by Kumar *et al.* (1994:31-32): market clustering, market potential estimation and demand analysis. Market clustering is concerned with determining similarities between markets. Market potential estimation approach uses indicators to evaluate the industry market potential and determine the country-segments most suitable for entry. Demand analysis is concerned with assessing the potential demand for a product in a target market to determine the country-segment most suitable for entry. Comparing the three strategies it can be concluded that the first is a macro level analysis, the second an industry level analysis and the last a product level analysis. Having touched on market clustering in Section 2.3, this study focuses on market potential estimation and demand analysis in order to identify the Middle Eastern markets with the highest export potential.

The process followed and results of the identification of the country with the highest export potential in the Middle East will be detailed in Chapter 4 using the identification and selection stages of evaluating foreign markets, market potential estimation and demand analysis strategies of quantitative assessment of markets. Product-specific information based on the requirements of government were used to evaluate the Middle Eastern countries for export potential and the assessment used quantitative indicators to measure the potential demand.

[2] Product-specific information refers to data which relates to a specific product (oranges) and not only a sub-sector (citrus fruit).

As the identification of markets was not an elimination process, market estimation was used. Market estimation of the Middle Eastern countries entailed evaluating the countries on a number of criteria and ranked according to the results of the analysis (Papadopoulos & Denis, 1988:41; Kumar *et al.*, 1994:34). Usually countries are ranked on the basis of aggregate market potential and overall attractiveness (Sakarya *et al.*, 2006:212–213). Using market estimation by ranking the Middle Eastern countries allows the identification of the country with the highest export potential and highlights the countries with the most potential.

In the previous section, it was indicated that a market selection process should use methods that can easily be applied by South African exporters using available sources of trade information, and allow exporters to adjust the method to be more applicable to their business or industry. This need lead to use of the methodology of Freudenberg & Paulmier (2005) and Freudenberg *et al.* (2008), both of which are ITC studies. The simple methods used in both studies are easy to replicate and allow exporters to apply available information. Furthermore, these methodologies allowed analysis within the requirements of this study such as product-specific information and selection based on the requirements of a government export promotion agency, using market estimation techniques.

The process of market estimation will be detailed in Chapter 4, to identify the country in the Middle East with the highest export potential. The next section identifies the best indicators for the market selection in Chapter 4.

2.4.3 Indicators for market selection

Papadopoulos *et al.* (2002:167–168) analysed various models for international market selection and found that there was a lack of consensus regarding the indicators that should be used to measure market attractiveness. A market selection process should analyse multiple markets at an industry level in order to identify the most promising markets (industry specific), using easily accessible variables specific to the industry or product (Papadopoulos *et al.*, 2002:169; Kumar *et al.*, 1994:33). Variables should be relevant, frequently used in research, easily available, reliable and comparable (Papadopoulos *et al.*, 2002:171; Kumar *et al.*, 1994:33). As a result, the trade data used for the empirical studies presented in Chapters 3 and 4 was provided by Trade Map, which is a reliable and accessible source of trade data.

In order to determine the attractiveness of a market and identify whether a market holds possible export opportunities, the appropriate variables have to be used in the quantitative analysis. Papadopoulos and Denis (1988:43) mention that the ITC commonly uses size of imports, import growth, market coverage (import/export) and competition levels as part of multiple criteria variable selection in market selection. Cuyvers (2004:259) used growth of imports and the import market size as criteria for detecting possible export opportunities. Kumar *et al.* (1994:37) suggest that import size and import growth are variables that could be used to determine market potential. Sakarya *et al.* (2006:212–213) suggests analysing import size, growth of imports and import share as a percentage to analyse market potential. These indicators were used in the Middle East Import Index (Section 3.4.3.5) and will be used in the Middle East Market Attractiveness Index (Section 4.3).

The ITC developed a Trade Performance Index (TPI) to assess the trade competitiveness of a country (ITC, 2007). According to the ITC (2007:4–5), competitiveness can be measured by determining the growth of exports and the relative position of a country or product on the international market. The TPI assesses twenty-two quantitative indicators of trade performance, of which value of exports, growth of exports, share in world exports and net exports are relevant to this study. These indicators were used in the South African Export Performance Index (Section 3.4.3.4) and the Middle East Export Performance Index (Section 4.4).

Papadopoulos *et al.* (2002) used trade barriers as an indicator to measure the ease of access and the potential relative to other possible markets. Kumar *et al.* (1994:33) used tariffs, taxes, duties and quotas as indicators to measure the trade barriers. Papadopoulos *et al.* (2002:170) limited the analysis of potential markets to tariffs as non-tariff barriers were difficult to quantify. In the Middle East Import Index (Section 3.4.3.5), the average tariff applied to South Africa was used. In the Middle East Market Attractiveness Index (Section 4.3), the average tariff applied to South Africa and the average tariff applied to the top five non-Middle East exporters from Market Access Map (2009) were used.

Non-tariff barriers can be included in the qualitative analysis of the potential of the markets in order to ensure that the indicator is appropriately included (Papadopoulos *et al.*, 2002:170). The results of the qualitative analysis of the non-tariff barriers will be presented in Sections 5.5 and 5.6., in which import requirements and documentation as well as product-specific import requirements will be investigated. The next section discusses the importance of providing market information to exporters and the type of market information preferred by exporters.

2.5 Market information

This study arose from the outcomes of the DSM and the DTI's need for a study on export opportunities in the Middle East. Although a quantitative analysis of the results of the DSM could identify such opportunities, Cuyvers (2004:273) points out that these opportunities should not be regarded as a guaranteed opportunity that will result in export success. Cuyvers suggests that the market be studied to determine the extent of the opportunity and the manner in which it should be approached. This section discusses the importance of providing market information to exporters and the type of market information preferred by exporters to inform the content of the market profile in Chapter 5.

The services offered by export promotion agencies include market research (Lederman *et al.*, 2006:2), this is because governments have realised the value in providing market research to exporters. According to Cadogan, Diamantopoulos and Siquaw, (2002:618–619) and Spence (2003), increased export knowledge positively influences export performance. Exporters need to understand the barriers to entry into the market in order to determine the best way to approach the market (Cuyvers, 2004:273), which is provided through market research. Exporters rely on government agencies to provide market research, as they often do not have the financial resources or skills necessary to conduct export market research (Ahmed, Mohamed, Johnson & Meng, 2002:832). Cuyvers (2004:255) suggests that governments should gather detailed market information that should be centralised in order to be accessible to exporters.

Limited access to market information is the main factor contributing to the poor export performance of exporters, particularly small to medium-sized exporters (Spence, 2003:85; Cadogan *et al.*, 2002:615–616). Exporters with more experience in foreign markets have increased market knowledge owing to their exposure to the markets (Cadogan *et al.*, 2002:615–616). This is places small exporters in an unsolvable situation as small exporters with limited access to funds do not have the means to explore foreign markets in order to gain market intelligence and lack of market intelligence limits their chances of success. The role of government and an effective export promotion programme whereby exporters are exposed to the markets to gain market information is evident in this situation. Should exporters not be able to gain exposure to markets, the government should provide the market information (Cuyvers, 2004).

Wood and Robertson (1999) determined that exporters irrespective of their industry most value information regarding market potential, level of competition and export restrictions. Ahmed *et al.* (2002:832) found that the biggest barriers to exporters entering foreign markets are the lack of information about foreign markets, the complexities of export documentation and procedures, and the risks and uncertainties associated with new markets. Therefore, the market profile in Chapter 5 should ensure that exporters receive information regarding market potential, competition, and export restrictions in the form of tariff and non-tariff barriers. Essentially the exporter should be provided with as much information as necessary to make an informed decision to enter the market.

Market information is important to exporters as products need to be adapted to meet the requirements of the market, whether mandatory product requirements that have to be adhered to or requirements based on consumer preference (Baalbaki & Malhotra, 1993:23). Changing the product can have cost and time implications for the exporter, making information on the product of paramount importance to the exporter and necessary information that cannot be omitted. Product-specific import requirements will be examined in Section 5.6.

According to Baalbaki and Malhotra (1993:34), price-influencing factors need to be determined in considering a market for export, and will be provided in Section 5.7. The price-influencing factors can be determined by analysing the competition in the industry and determining the price leaders. The exporter can then evaluate whether it is possible to compete in the market. It is also important to determine the purchasing power of potential consumers in the market. This can be determined by analysing the spending habits of the country or determining the per capita income of the country. Demand and consumption patterns will be discussed in Section 5.3.

Baalbaki and Malhotra (1993:36) suggest that the distribution channels available in a market need to be determined in order to allow the exporter to identify the most suitable distribution channel. In the Middle East, finding a local agent is the key to trading in the region, as a good agent will help smooth the way in negotiating international transactions with local buyers (Nims, 2007:74). However, this is only one distribution channel. Baalbaki and Malhotra (1993:36) also suggest determining the capability of the transport infrastructure, government regulations and laws affecting distribution. Giunipero and Flint (2001:686) hold that improvements in logistics and information competencies have created more opportunities in the global marketplace for distribution. Therefore, the distribution channels will be discussed (in Section 5.8), addressing all

of the aspects mentioned by Giunipero and Flint in order to ensure that all of the relevant market information on distribution is provided.

Baalbaki and Malhotra (1993:32) explain that it is important for exporters to understand the culture and habits of consumers in countries. According to Nims (2007:74), the Middle East is a volatile region in which business must be negotiated with sensitivity and all aspects of business are affected by the religion of the region. According to the Nims, personal interaction is critical in all business transactions in the Middle East, with personal contact or a phone conversation preferred to e-mail. Understanding the way consumers communicate is essential to determining the methods of promotion of goods and services (Baalbaki & Malhotra, 1993:32).

Marketing in foreign markets requires that the unique selling points of the product be effectively communicated to the potential buyer. Therefore, it is important to determine the best method of communicating with the potential buyer in the foreign market. In some countries, governments regulate marketing activities; thus, it is important to determine not only the way to communicate with the potential buyer but also the way to do so legally (Baalbaki & Malhotra, 1993:32). Section 5.10 will analyse the marketing methods in the markets in order to determine the most effective methods of communicating the product to the potential buyer.

This section has discussed the importance of providing market information to exporters and highlighted the type of market information preferred by exporters. The type of information required by exporters, which will be provided in Chapter 5, is the following: general market information, demand and consumption information, market access information (tariff), import requirements and documentation, product-specific import requirements, factors influencing pricing, distribution channels, methods of payment and marketing. The next chapter will present the empirical study based on the findings of Section 2.3 in order to identify the product with the highest export potential to the Middle East.

3. IDENTIFICATION OF THE PRODUCT WITH THE HIGHEST EXPORT POTENTIAL TO THE MIDDLE EAST

3.1 Introduction

In this chapter, a product or group of products with export potential to the Middle East countries are selected from the results of the DSM (Viviers & Pearson, 2007). The product selection in this chapter involved a three-phase filtering process that eliminated certain products according to set criteria. The purpose of the product selection was to identify the products that firstly form a geographic export cluster and secondly hold export potential. Phase 1 determined the products with potential to the most Middle East countries using a product/market matrix. Phase 2 consisted of a selection process according to trade performance criteria and had two parts: the first part identified the products that are currently exported to most Middle Eastern countries and the second part identified products that have positive export growth to most Middle Eastern countries. Phase 3 consisted of a more rigorous selection process of the products that remained from Phase 2. This chapter provides the results of the three-phase filtering process and identifies the product or group of products with the highest export potential in the Middle East. The next section will discuss the data used in this chapter for the three-phase filtering process.

3.2 Description of the data used

The data used in this chapter is SITC and HS trade data. In this chapter, reference is made to both types of classification; therefore, it is important to establish the difference between them and understand the way they are used. According to the ITC, SITC codes and HS codes are two different trade classifications. The main difference is that the SITC codes are more focused on the economic functions of products at various stages of development, whereas the HS codes deal with a precise breakdown of the products' individual categories (ITC, 2009).

The SITC was developed by the United Nations to classify traded products not only on the basis of their material and physical properties, but also according to their processing stage and economic functions in order to facilitate economic analysis. The SITC was originally developed for statistical purposes and it had to maintain a correlation with the tariff nomenclature (classification) of customs, given that the customs declarations are the principal source of trade data. After its introduction, trade data was provided according to the SITC classification for

various products. The SITC had undergone three revisions to maintain consistency with the development of tariff nomenclatures. The SITC Revision 3 was adopted in 1988 and maintained the basic ten-section structure of the previous editions. The sections are subdivided into 67 two-digit divisions, 261 three-digit groups, 1,033 four-digit groups, and 3,121 five-digit headings (ITC, 2009).

The HS is an international nomenclature for the classification of products. It allows participating countries to classify traded goods on a common basis for customs purposes (Trade Map, 2009). The HS was introduced in 1988, and since then it has become an internationally accepted method of classification wherever products are traded. The HS classification was revised in 1996 to become 'harmonized' in relation to the classifications of the United Nations and the European Communities. Goods are classified according to simple objective criteria and applications. The HS included a six-digit sub-heading that was introduced for more precise tagging of products. At present, this system contains twenty-one sections, ninety-seven chapters and 1,241 headings at the four-digit level, 930 of which are further divided into sub-headings, representing a total of 5,113 separate categories of goods identified by a six-digit code (ITC, 2009). At the international level, the HS is a six-digit good classifying code system (Trade Map, 2009). Most of the countries that have adopted the HS six-digit codes, have added one or more digits in order to further classify products of particular national interest (eight-digit or ten-digit level; ITC, 2009). The most important characteristic of the HS system that is relevant to this study is that across all countries, products are classified according to the **same** six-digit HS. From eight-digit HS level upwards, each country classifies a specific product according to national regulations (ITC, 2009). As this study focused on the international flow of products, the HS classification system of products was used for the trade analysis of the products in this chapter. The following section addresses the determination of the products that represent potential trade in the most Middle East countries.

3.3 Product selection

This section discusses the approach used in the chapter for determining the product with the highest export potential to the Middle East. The DSM is briefly explained and the how the results of the DSM will be used to identify the product with the highest export potential to the region. To ensure that the region is effectively analysed, the section discusses the clustering of countries as a basis for product selection. This section also examines the requirements for measuring the potential of a product within a cluster.

3.3.1 Decision Support Model

Viviers and Pearson (2007) used the DSM methodology of Cuyvers *et al.* (1995) to identify realistic export opportunities for South Africa. The DSM applies four filters to identify product/market combinations that hold the most potential for South African exporters. The filtering process eliminates less realistic export opportunities and focuses on the product/market combinations that demonstrate the highest potential. The four filters applied by the DSM are the following (Cuyvers *et al.*, 1995; Viviers & Pearson, 2007):

i. Macroeconomic analysis
    i. Political and commercial risk – countries with the highest risk are eliminated
    ii. Economic size and economic growth – countries with a low GDP, low economic growth or both are eliminated

ii. Detection of possible export opportunities
    i. Revealed Comparative Advantage (RCA) – products with a low RCA are eliminated
    ii. Import demand – products not exhibiting a relative import market size and/or short- and medium-term import growth are eliminated

iii. Realistic export opportunities
    i. Degree of market concentration – products not meeting the required degree of market concentration in a given country are eliminated
    ii. Import restrictions/barriers to entry – product/market combinations exceeding a specific distance from South Africa were eliminated (distance was used as a proxy for barriers to trade)

iv. Final analysis of export opportunities – product/market combinations are categorised according to market share and market growth

Although the DSM is a useful tool for the identification of potential products and markets for export, it is essential to bear in mind that the product/market combinations identified by the DSM need to be supplemented with further research. The reason for this is three-fold. Firstly, the DSM results of Viviers and Pearson (2007) made use of import data for the period 2000 to 2002, which means that the application of the DSM needs to be tested with the most recent trade data in order to determine the present feasibility of the product/market combinations. Secondly, the model does not consider tariff- and non-tariff barriers in its third filter of the filtering process. Thirdly, while the Viviers and Pearson (2007) study used the SITC classification of products, HS data is more relevant to exporters, as they use HS codes in all their export transaction documents.

Therefore, the results need to be supplemented with further analysis in order to provide a more detailed and relevant approach and outcome for the relevant exporters and the DTI.

One of the outcomes of the DSM was that it provided twelve geographical clusters for the countries with a high export potential (Viviers and Pearson, 2007). In order to assist the DTI in its export promotion activities, it is necessary to determine whether there are common potential products within these regions with high export possibilities. Therefore, if this study demonstrates that one specific geographical region has a high export potential for a product that the DSM identified, South Africa (and the DTI) might benefit by developing an export strategy for that region as a whole for that given product or sector. It is important to note, however, that the product may not hold equal potential in all of the countries within the region. Supplementary research will also have to be conducted in order to determine which countries in the region hold the highest import potential for the identified product. For an exporter to enter a specific geographical region, it might be best to identify the country with the highest import potential in that region to act as a **first** point of entry.

The DSM of Viviers and Pearson (2007) identified **911 export opportunities** to the Middle East in eight countries, which translated into 360 product opportunities. The results of the DSM identified 125 potential export products to Bahrain, 127 to Iran, 83 to Israel, 93 to Kuwait, 114 to Oman, 139 to Qatar, 103 to Saudi Arabia and 127 to the UAE. This study explores the export potential of the Middle East because of the large number of products and the large number of Middle Eastern countries that the DSM identified (see section 1.4.2). The following section describes the clustering of countries as a basis for product selection.

3.3.2 Clustering of countries as a basis for product selection

As the objective of this study is to provide market information for exporters about the Middle East for a product or products in order to inform a regional export strategy or geographical export cluster (see Section 1.4), the purpose of this chapter is to identify a product or group of products that hold the highest export potential to the largest number of Middle Eastern countries. This means that countries' similarities, particularly with regard to trade indicators, should be determined in order to identify a set of potential products and markets that exhibit clustering characteristics (see section 2.3).

According to Sakarya *et al.* (2006:212–216), a group of countries can be clustered together on the basis of similarity. It is therefore a requirement that a group of countries clustered together for the purpose of exporting a given product, exhibit the same demand potential for that given product. Therefore, the product or products identified as holding the highest export potential must demonstrate the same demand characteristics to the largest number of Middle Eastern countries (see section 2.3).

The DSM of Viviers and Pearson (2007) identified potential export products to Bahrain, Iran, Israel, Kuwait, Oman, Qatar, Saudi Arabia and the UAE. The next step in the clustering process was to find the common products amongst the identified countries, which will be the products holding the most export potential to the largest number of countries in the Middle East region. Once common products had been determined, trade data was used to determine the common import demand. The following section discusses the process of measuring the similarities in demand potential, required for a cluster, with the use of trade indicators.

3.3.3 Measuring the requirements of a potential product within a cluster

In order to select a product with the highest export potential to the largest number of Middle Eastern countries from the results of the DSM, an analysis of the products to identify the products meeting the requirements of a cluster was required. Therefore, the indicators for a cluster had to be determined and the products had to be analysed according to those requirements.

Sakarya *et al.* (2006:212–213) requires that countries in a cluster have similar aggregate market potential and overall attractiveness for a product, suggesting that the analysis of markets considers the size and growth of imports for a product. The strength of a product can also be determined by analysing the relative position of a product in the international market coupled with its development over time, i.e. ranking of a product as an import product coupled with growth rates of imports (ITC, 2007:4). The requirements of a product with the highest export potential to the Middle East is that the product has similar market size, market share and growth trends for most of the countries in the region.

Sakarya *et al.* (2006:212–213) holds that the analysis of the markets or products in a cluster use indicators that are comparable across all of the countries in the geographic region. This means that the trade indicators used for the analysis should be available for all of the products and

countries. The ITC (2007:5) provided a list of twenty-two quantitative indicators for the measurement of trade performance. However, as the number of products identified for the analysis is substantial and due to data availability, the number of indicators used in the analysis was limited to the following: value of imports, value of exports, import growth rates, relative share of exports and trade balance.

Furthermore, the analysis using the trade indicators considered the short-term trends and an emphasis on changes between 2007 and 2008. The rationale for this is that 2008 represented a year of poor global economic growth, characterised by reduced merchandise trade. It is assumed that should there be significant and/or growing trade for a product and country within a 'depressed' year, then that product and country will most probably have a competitive advantage, which should be explored.

Therefore, once common products with export potential to the most Middle Eastern countries had been identified, these products were analysed using trade indicators. The analysis determined the products that meet the requirements of a cluster regarding similarity of market attractiveness and potential. The product with both similar market attractiveness for the most countries in the Middle East and the most favourable trade performance was regarded as the product with the most export potential to the Middle East. The following section details the analysis of the products identified in the DSM with export potential in the Middle East, according to the requirements of a cluster and selected trade indicators in order to identify the product with the most export potential in the Middle East.

3.4 Selecting a product using a clustering framework

The product selection process consists of a three-phase filtering process. Phase 1 consisted of compiling a product/market matrix in order to determine the products with potential to the most countries in the Middle East. Phase 2 consisted of the selection process according to the selected trade performance criteria. Phase 3 consisted of a more rigorous selection process of the products that remained from Phase 2. Each of these phases is subsequently discussed.

3.4.1 Phase 1: Identifying products with a high export potential for a large number of Middle Eastern countries

The first step of Phase 1 involved tabling the products for each country identified by the DSM in order to determine which products have export potential in most of the countries in the Middle Eastern region. This was done by compiling a product/market matrix for each product in order to determine the number of countries in which this product has export potential. In the product/market matrix (see Table 3.1), a product is assigned a value of 1 if it is was identified by the DSM as having export potential to a specific country and 0 if the product was not identified for a specific country. The total number of countries with identified potential is summed up and the product categories are ranked according to number of countries for which the DSM identified export potential. Therefore, the products are ranked according to the number of Middle Eastern countries with export potential as identified by the DSM (also see section 2.3).

The second step of Phase 1 was to determine a criterion for the elimination of products. A criterion was set for a product to move onto the next phase of selection. The criterion was that the product be exported to at least five of the eight markets, i.e. to 62,5 per cent of the markets. The DSM identified 360 products with export potential to the Middle East. After the application of the above-mentioned criterion, only 34 products had high export potential in five or more of the countries. There were no products identified with export potential to all eight countries. The 34 products that were identified according to the above-mentioned criteria are listed in Table 3.1.

This phase identified the products that had export potential to the most Middle Eastern countries. These products meet the requirement of a cluster, i.e. that products have potential across a number of countries in a region (also see section 2.3).

The following section analyses the products identified in Phase 1 with the use of the trade indicators (see Section 3.3.3.). This was done in order to determine which products meet the cluster requirements of similarity of market attractiveness and export potential.

Table 3.1: List of products identified in Phase 1

SITC product	Bahrain	Iran	Israel	Kuwait	Oman	Qatar	Saudi Arabia	UAE	Number of countries with identified potential
7284: Mach.& appliances for specialised particular industries	1	1	1	1	1	0	1	1	7
2929: Other materials of vegetable origin, n.e.s.	1	1	0	1	1	1	0	1	6
5331: Other colouring matter, inorganic products	1	1	0	0	1	1	1	1	6
0116: Edible offal of animals in headings 001.1–001.5	1	0	0	1	1	1	0	1	5
0565: Vegetables, prepared or preserved, n.e.s.	0	1	0	0	1	1	1	1	5
0585: Juices; fruit and vegetable (including grape must) unfermented	1	1	0	0	1	1	1	0	5
0741: Tea	1	0	1	0	1	0	1	1	5
3345: Lubricating petrol oils and other heavy petrol oils	1	0	1	1	0	1	1	0	5
3351: Petroleum jelly and mineral waxes	1	1	0	1	1	1	0	0	5
3354: Petroleum bitumen, petrol, coke and bitumen mixture, n.e.s.	0	1	0	1	1	0	1	1	5
5169: Organic chemicals, n.e.s.	1	0	1	0	1	1	0	1	5
5225: Other inorganic bases and metallic oxides, hydroxide and peroxide	0	1	1	0	1	1	1	0	5
5621: Mineral or chemical fertilizers, nitrogenous	1	1	0	0	1	1	1	0	5
5629: Fertilizers, n.e.s.	0	0	1	1	1	1	1	0	5
6359: Manufactured articles of wood, n.e.s.	1	0	0	1	1	1	0	1	5
6412: Printing paper and writing paper, in rolls or sheets	1	1	0	1	1	1	0	0	5
6428; Articles of paper pulp, paper, paperboard, cellular wadding	1	1	0	0	1	1	1	0	5
6672; Diamonds, unworked, cut or otherwise worked, not mounted/set	0	1	1	1	0	0	1	1	5
6731: Wire rod of iron or steel	1	0	0	1	1	1	1	0	5
6733: Angles, shapes and sections and sheet piling, of iron/steel	0	1	1	1	1	1	0	0	5
6822: Copper and copper alloys, worked	0	1	0	1	1	1	0	1	5
6852: Lead and lead alloys, worked	0	1	1	0	1	1	1	0	5
6863: Zinc and zinc alloys, worked	0	1	1	1	0	1	0	1	5
6954: Interchangeable tools for hand and machine tools	1	0	0	1	0	1	1	1	5
6996: Miscellaneous articles of base metal	1	1	1	0	0	0	1	1	5
7139: Parts of internal combustion piston engines of 713.2-/3-/8-	1	1	0	1	1	0	1	0	5
7252: Paper and paperboard cutting machines of all kinds	1	1	0	0	0	1	1	1	5
7361: Metal cutting machine tools	0	1	0	0	1	1	1	1	5
7781: Batteries and accumulators and parts	0	1	1	0	1	1	0	1	5
7822: Special purpose motor lorries and vans	1	0	1	1	0	1	1	0	5
8461: Under garments, knitted or crocheted of wool	1	0	1	0	1	1	0	1	5
8482: Articles of apparel and clothing accessories, of plastic	1	1	1	0	0	1	0	1	5
8745: Measuring, controlling and scientific instruments	1	1	0	1	0	1	1	0	5
8748: Electrical measuring, checking, analysing instruments	1	1	0	1	0	0	1	1	5

Source: Viviers and Pearson (2007)

3.4.2 Phase 2: The selection process using the identified trade indicators

This section determines the products meeting the requirements of a cluster regarding similarity of market attractiveness and export potential. The product with both similar market attractiveness for the most countries in the Middle East and the most favourable trade performance was regarded as the product with the most export potential to the Middle East (see section 2.3).

3.4.2.1 Phase 2.1: Converting the trade codes of the products

The DSM used import statistics at SITC four-digit level and the results were provided using the same SITC product classification. The thirty-four products from Phase 1 fall within the SITC product classification system. For purposes of the study, the trade analysis according to the HS product classification system was used, as the HS six-digit data is a more specific product classification compared to SITC, which allows for a more focused product selection. Another advantage of using HS codes is that all trade indicators and data are internationally gathered using HS codes (Trade Map, 2009), which means that trade data is more easily available in this format. Therefore, the first step of Phase 2 was to convert the trade codes from SITC codes into six-digit HS.

The conversion of SITC to HS was executed using the UNSD (2009) conversion for HS 2007 and SITC Revision 2. After this conversion, the number of product categories increased from thirty-four products at four-digit SITC to 387 products on six-digit HS. This meant that the number of products with export potential to the Middle East had increased and that the product description was more specific. The remainder of the chapter considers the 387 products on six-digit HS. The following sections present the analysis of the products to determine the similarity of market attractiveness and potential using export values and export growth.

3.4.2.2 Phase 2.2: Identifying products with a high export potential for a large number of Middle Eastern countries using export values

The second step of Phase 2 was to determine the export values of each product to each country in the Middle East. The trade statistics were gathered for each of the 387 products at six-digit HS level. Iran was removed as a possible import country because the data was not available in trade data sources such as Trade Map or Quantec for the period of this study. As a result, the number of countries being analysed was reduced from eight to seven.

Another product/market matrix was created for the products at six-digit HS code level using trade data collected from Quantec (2009) for the periods 1998 to 2008. The trade data was collected for all 387 products according to six-digit HS between South Africa and each of the Middle East countries in Rand. The purpose of this product/market matrix was to determine which products have been exported to the selected Middle East countries according to the required criteria.

A longer-term view in this first selection process was used because growth analysis perspectives formed part of a later filtering process (see Section 3.4.3). The sum of the each product's export value over the period from 1998 to 2008 for each country was used to construct the table. The product's export sum values formed the rows and the countries formed the columns of this matrix. Similar to the first SITC-level matrix (see Table 3.1), the HS code matrix had the criterion of a five-country minimum, i.e. a count of five or more. Products that have been exported to less than five countries were consequently eliminated. The result of this was that the product count was reduced from 387 products to eighty products. The eighty remaining products are given in Table A.1 in Annexure A.

3.4.2.3 Phase 2.3: Identifying products with a high export potential for a large number of Middle Eastern countries using export growth

The third step of Phase 2 was to create a short-term export growth product/market matrix. The growth between 2007 and 2008 was determined for each product for each of the seven countries using six-digit HS data. The purpose of this product/market matrix was to determine which products have been experiencing positive export growth to the most Middle East countries.

There were products for which the average growth across the countries was undeterminable, owing to no export values in either 2007 or 2008. Because of this, seventeen products had to be eliminated. Products with a determinable growth value for two or less countries were also eliminated, owing to the unattractive export potential for the region in the instance that so few countries exhibit determinable export growth for a specific product. As a result, twenty-four products were eliminated.

The process then determined the number of products that had positive growth in the most countries. Products for which there was positive growth in two or less countries were eliminated. Only four products had negative growth across all countries, twelve products exhibited positive

growth for one country and thirteen products exhibited positive growth for only two countries. The elimination process then identified ten products, which are listed in Table 3.2.

Table 3.2: List of products identified in Phase 2.3: Export growth 2007 to 2008

Export growth 2007–2008; %										
HS product	Bahrain	Israel	Kuwait	Oman	Qatar	Saudi	UAE	Average growth	Number of countries with positive export growth in 2007–2008	Number of countries with export values in 1998–2008
200990: Mixtures of juices, not fermented or spirited	20.23	153200.00	40.17	283.29	111.13	67.37	28.51	21964.38	7	7
200980: Fruit and vegetable juice, not fermented or spirited	13.78	696384.62	89.85	336.28	69.98	16.23	180.30	99584.43	7	7
200919: Orange juice, not fermented, spirited, or frozen	-61.10	---	58.28	203.61	101.41	75.97	91.32	78.25	5	6
200929: Fruit juices (including grape must) and vegetable juices, unfermented and not containing added spirit, whether or not containing added sugar or other sweetening matter – grapefruit juice	-100.00	9.79	-19.06	197.54	133.99	-70.94	-27.18	17.73	3	7
200949: Fruit juices (including grape must) and vegetable juices, unfermented and not containing added spirit, whether or not containing added sugar or other sweetening matter – pineapple juice	-100.00	250.43	4.35	145.14	194.80	156.95	3.15	93.54	6	7
200969: Fruit juices (including grape must) and vegetable juices, unfermented and not containing added spirit, whether or not containing added sugar or other sweetening matter – grape juice (including grape must)	-100.00	---	25.19	309.26	89.72	250.63	15.79	98.43	5	6
200979: Fruit juices (including grape must) and vegetable juices, unfermented and not containing added spirit, whether or not containing added sugar or other sweetening matter – apple juice	-100.00	-100.00	88.41	376.71	48.34	1796.68	34.21	306.34	5	7
271290: Mineral waxes, n.e.s.	---	---	-78.26	53.32	-100.00	334.40	566.67	155.23	3	5
480256: Uncoated paper and paperboard, of a kind used for writing, printing or other graphic purposes, and non-perforated punch-cards and punch tape paper, in rolls or rectangular (including square) sheets, of any size (excluding paper of heading 48.01)	-80.50	---	64.58	76.36	11.59	33.86	21.46	21.22	5	6
903039: Ammeters, voltmeters, ohm meters and similar, non-recording	-100.00	129.54	---	---	---	0.33	384.46	103.58	3	4

Source: Quantec (2009)

The most prominent product group amongst the remaining products was fruit juices, which accounted for seven out of the ten products. Furthermore, two products were being exported from South Africa to all of the Middle Eastern countries and were experiencing short-term growth in exports to all of the Middle Eastern countries. These products were 200990: Mixtures of juices, not fermented or spirited, and 200980: Fruit and vegetable juice, not fermented or

spirited. Therefore, **fruit juice** was identified as the product with the most export potential to the Middle East.

The results of the analysis of fruit juice as a product group are given in Section 3.4.3 and will be in the country determination in the following chapter. The individual fruit juice types at six-digit HS that were eliminated in Phase 2.1 (see Section 3.4.2.2) and Phase 2.2 (see Section 3.4.2.3) will again be added in the analysis of the fruit juice product group. The reason for this was to ensure that the remainder of the analysis of fruit juices included all types of fruit juices.

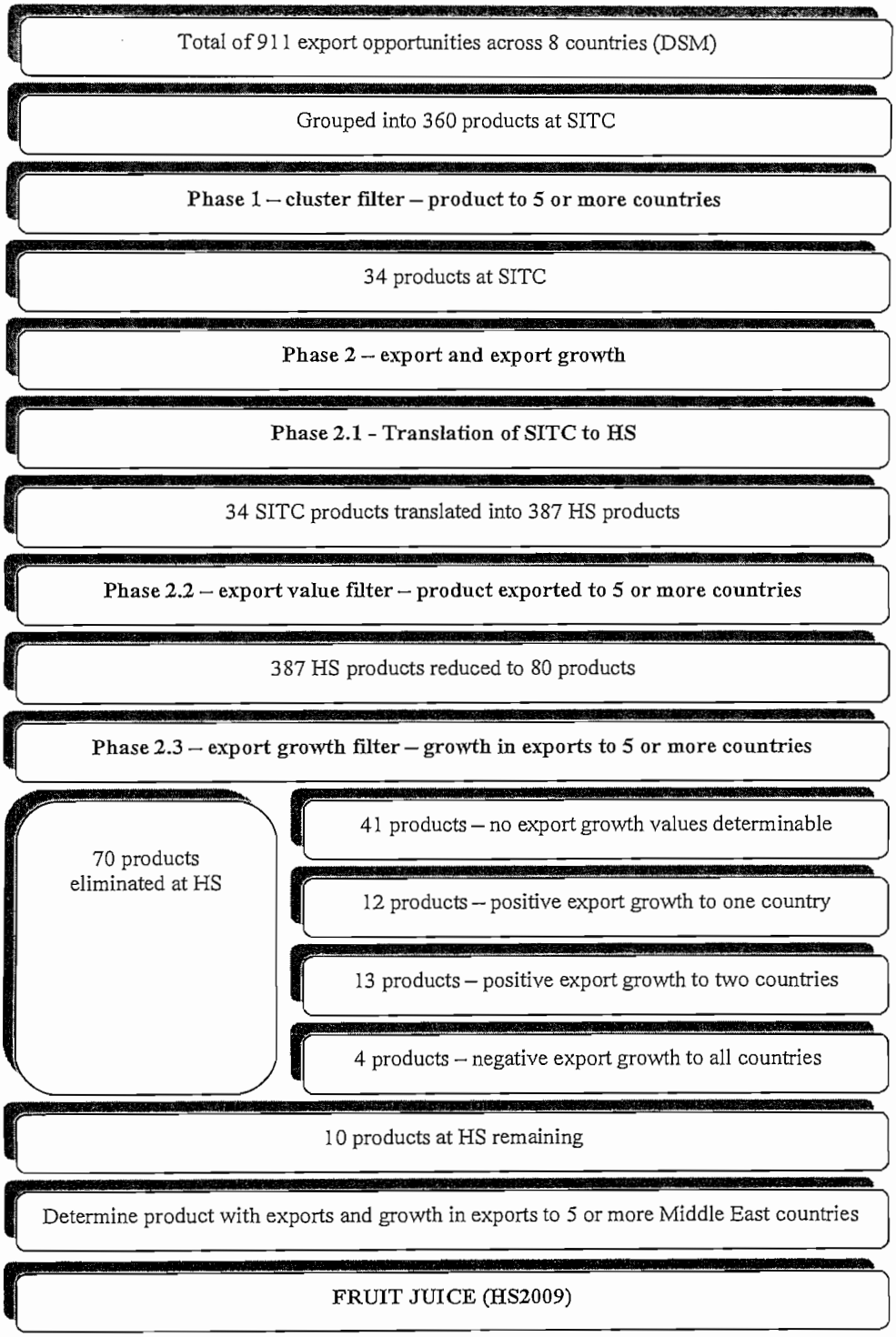
The filtering process in Phase 1 and 2 was complex and involved many processes. As a result, the next section will summarise the processes that lead to the identification of fruit juice as a product group with the highest export potential to the Middle East

3.4.2.4 Summary of Phase 1 and Phase 2 filtering process

This section is a brief summary of the filtering processes in Phase 1 (see Section 3.4.1) and Phase 2 (see Sections 3.4.2.1, 3.4.2.2, and 3.4.2.3) in order to indicate the analysis and narrowing down of the export opportunities identified in the DSM (Viviers & Pearson, 2007) for the Middle East to the final list of products. As the filtering processes in Phase 1 and Phase 2 were complex, it is necessary to summarise the results graphically, detailing the process leading to the identification of fruit juice as the product with the most export potential to the Middle East. The graphical representation of the filtering process of Phases 1 and 2 is given below in Figure 3.1.

From Figure 3.1, it is evident that the 911 potential export opportunities to the Middle East were grouped into 360 SITC products entering Phase 1. After the application of the filter criterion in Phase 1, the number of products was reduced to thirty-four products with export potential in the Middle East. In Phase 2.1, the products were classified into HS codes from the SITC codes, which increased the number of potential products into the Middle East to 387 products. After application of the filter criterion in Phase 2.2, the number of products was reduced to eighty products. Finally, the number of products with potential export to the Middle East was reduced to ten in Phase 2.3.

Figure 3.1: Filtering process of Phase 1 and Phase 2



Source: Viviers and Pearson (2009); Quantec (2009)

At the end of Phase 2.3 (see Section 3.4.2.3), fruit juice was identified as the product with the most export potential in the Middle East. The next section analyses fruit juice in order to determine which fruit juice types have export potential in the Middle East.

3.4.3 Phase 3: Identifying the type of fruit juice with the most potential

The aim of Phase 3 was to determine which of the fruit juice types hold the most export potential to the Middle East. An analysis was conducted on the fruit juice types across the countries collectively as a region. However, **this phase was not an elimination phase** but determined the fruit juice types holding the most export potential. Once the identified potential markets have been discussed in Chapter 4, these juice types will form the focus of discussion in Chapter 5.

This phase analyses the demand of fruit juice in the Middle East and evaluates the export potential to the Middle East using indexing methods. A composite index was developed to determine the type of fruit juice with the highest export potential to the Middle East.

3.4.3.1 Simplification of the Harmonized System classification of fruit juice

To prepare the data for the analysis in this section, the types of fruit juice were classified according to the relevant six-digit HS code. In the HS classification of fruit juice, the fifth digit of the HS code refers to the type of fruit juice and the sixth digit refers to the sugar content (Brix value) or the state (frozen or fresh) of the juice (European Commission, 2009). This study only concentrates on the type of fruit juice and not the sugar content or the state of the fruit juice, as this level of analysis is too detailed. The final digit in the six-digit HS classification was therefore left as zero. The hierarchy of the six-digit classification is given in Table 3.3. The simplified HS codes for the types of fruit juice were used in the analysis of the export potential of fruit juices in the Middle East, as detailed in the subsequent sections (see Sections 3.4.3.4 to 3.4.3.6).

Once the classification of the fruit juice was completed, the analysis of the export potential of fruit juice could take place. The next section discusses the evaluation of the export potential of fruit juice by using trade indicators and indices to identify the type of fruit juice with the most export potential in the Middle East.

Table 3.3: Hierarchy of fruit juices according to Harmonized System nomenclature

HS code		Product description
SECTION IV		PREPARED FOODSTUFFS; BEVERAGES, SPIRITS AND VINEGAR; TOBACCO AND MANUFACTURED TOBACCO SUBSTITUTES
2009		Fruit juices (including grape must) and vegetable juices, unfermented and not containing added spirit, whether or not containing added sugar or other sweetening matter
200910		Orange juice
	200911	-- Frozen
	200912	--Not frozen, of a Brix value not exceeding 20
	200919	-- Other
200920		Grapefruit (including pomelo) juice
	200921	--Of a Brix value not exceeding 20
	200929	-- Other
200930		Juice of any other single citrus fruit
	200931	--Of a Brix value not exceeding 20
	200939	-- Other
200940		Pineapple juice
	200941	--Of a Brix value not exceeding 20
	200949	-- Other
200950		Tomato juice
200960		Grape juice (including grape must)
	200961	--Of a Brix value not exceeding 30
	200969	-- Other
200970		Apple juice
	200971	--Of a Brix value not exceeding 20
	200979	--Other
200980		Juice of any other single fruit or vegetable
200990		Mixtures of juices

Source: European Commission (2009)

3.4.3.2 Evaluating the export potential

Freudenberg and Paulmier (2005:33) define the term *export potential* as the capacity to expand exports, holding that some products could be considered to have high potential owing to an established and proven export record. This becomes evident from high export values and/or high export growth rates for a certain period.

The methodology developed by the ITC to rank product groups according to their potential for growth was applied in this section of the study. Freudenberg and Paulmier (2005) conducted a study to determine product groups that hold export opportunities in Vietnam. The study considered various indicators focusing on Vietnam's export performance, global import demand for Vietnamese product groups and domestic production of goods in Vietnam.

The methodology of Freudenberg and Paulmier (2005), as well as Freudenberg, Paulmier, Ikezuki and Conte (2008a), was used in this study to determine which product groups hold export opportunities for a given market. The difference between the studies of Freudenberg and Paulmier (2005) and Freudenberg *et al.* (2008a) is that the former considered domestic production, while the latter only considered exports and global imports. The rationale for the exclusion of production data in this study is the unavailability of production data at a product level, particularly fruit juices (FAOSTAT, 2009). Therefore, the methodology of Freudenberg *et al.* (2008a) was used.

Freudenberg and Paulmier (2005) and Freudenberg *et al.* (2008a) used a variety of indicators to determine a country's export performance and to assess world imports of each product, which were developed into sub-indices. The sub-indices were the Export Performance Index and the World Imports Index. These sub-indices were compiled into a composite index in order to measure the overall export potential of a product. The composite index indicates the extent to which a country's export structure is adapted to world demand and determines which product groups hold the most export opportunities in world markets.

This study uses this methodology, focusing on the fruit juices product group, in order to determine the type of fruit juice with the most export potential to the Middle East. A composite index, namely the overall South African Export Potential Index, was developed in order to determine which fruit juice types have the most export potential to the Middle East. This composite index was comprised of two sub-indices, the South African Export Performance Index and the Middle East Import Index.

Freudenberg *et al.* (2008a:71–74) determined a European import index in order to assess specifically the potential opportunities in the EU 27 countries. This methodology was applied in this study in order to create the Middle East Import Index.

An export performance index measures the export performance of each product group by considering size, dynamism and trade balance (Freudenberg *et al.*, 2008a). The current export performance of a country for a given product can be measured using indicators such as its exports in value, the world market share, and growth rates of export (Freudenberg & Paulmier, 2005). The South African Export Performance Index determined the overall export performance of **each type of juice** using the following indicators for fruit juices at the six-digit HS level:

- South Africa's exports in value in 2008 in USD in thousand ('000);
- share of South Africa's exports in world exports in 2008;
- growth of South Africa's exports (%) in value between 2004 and 2008;
- growth of South Africa's exports (%) in value between 2007 and 2008, and
- South Africa's relative trade balance (%).

A Middle East Import Index measures the size, dynamism and market access conditions of each product (Freudenberg *et al.*, 2008a). It is important to measure the characteristics of the international environment, such as growth of world demand and a country's access conditions to international markets in determining the attractiveness of a product in the global market (Freudenberg & Paulmier, 2005). The Middle East Import Index used the following indicators for **each type of fruit juice** at the six-digit HS level for the Middle East:

- Middle East imports in value in USD in 2008 in thousand ('000);
- growth of Middle East imports (%) in value between 2004 and 2008;
- growth of Middle East imports (%) in value between 2007 and 2008;
- average tariff applied to South Africa for fruit juice (%);
- Middle East exports in value in USD in 2008; and
- Middle East's relative trade balance (%).

The trade indicators identified in this section need to be converted into indices in order to develop the composite index. The next section discusses the conversion of trade indicators into indices.

3.4.3.3 Converting the trade indicators into indices

Variables need to be standardised or normalised before they can be aggregated into a composite indicator in order to ensure that the different measurement units do not complicate the basis of comparison of the variables (Freudenberg *et al.*, 2008a). A normalisation method, in which each

indicator is converted into a range from 1 (weak performance) to 5 (strong performance), was used in Freudenberg and Paulmier (2005:34). A threshold value is determined and products with a value below or equal to the threshold are assigned an index value of 1 and products with a value above or equal to the threshold are assigned an index value of 5. All other products receive a value between 1 and 5 depending on their relative distance between the two thresholds. Freudenberg and Paulmier (2005:34) used the following formula to determine the values of the index, which was also used in this study:

$$1+4\left(\frac{Value-Lower\ threshold}{Upper\ threshold-Lower\ threshold}\right)$$

If the value of an indicator equals the upper limit, the ratio is 1 and the term becomes 1+4(1)=5. If the value equals the lower limit, the ratio is 0 and the term becomes 1+4(0)=1 (Freudenberg & Paulmier, 2005).

After the trade indicators have been converted into indices the analysis of the export potential of fruit juice can proceed. The next section presents the analysis of the export performance of South African fruit juice according to the indicators and indices.

3.4.3.4 South African Export Performance Index

An export performance index measures the export performance of each product group by considering size, dynamism and trade balance (Freudenberg *et al.*, 2008a). The current export performance of a country for a given product can be measured using indicators such as its exports in value, the world market share and growth rates of export. The South African Export Performance Index was developed from Trade Map (2009) data and considered the indicators mentioned in Section 3.4.3.2 above. This index measures South Africa's trade performance of fruit juices. Table 3.4 shows the indicators that formed the index.

Table 3.4: South African Export Performance Index indicators

HS code	Product label	SA's exports in value in 2008 (USD '000)	Share of SA exports in world exports in 2008 (%)	Annual growth in value between 2007 and 2008 (% p.a.)	Annual growth in value between 2004 and 2008 (% p.a.)	SA's Imports value in 2008 (USD '000)	(X–M)/ (X+M) in %
200910	Orange juice	16570	0.78	29.90	29	2163	76.91
200920	Grapefruit juice	21254	12.37	-38.62	-4.5	172	98.39
200930	Single citrus fruit juice	11978	3.96	152.31	61	188	96.91
200940	Pineapple juice	15861	3.80	15.87	34	727	91.23
200950	Tomato juice	59	0.11	18.00	-6	19	51.28
200960	Grape juice	20023	2.84	58.57	29.5	25634	-12.29
200970	Apple juice	26006	2.62	46.06	9	19630	13.97
200980	Fruit and vegetable juice	31557	1.33	48.52	6	6906	64.09
200990	Mixtures of juices	28006	2.00	23.60	20	524	96.33

Source: Trade Map (2009)

From Table 3.4, the following can be concluded:

i) **Fruit and vegetable juices are the largest fruit juice product exported from South Africa followed by mixtures of juices.** According to Freudenberg and Paulmier (2005:37), sectors with large export values are the 'breadwinners' as these sectors have already proven their competitiveness and should be well positioned for future exports. These juice types may be regarded as well positioned for future exports.

ii) **South African grapefruit juice hold the largest share of juices exported at 12.37% of world exports.** According to Freudenberg and Paulmier (2005:38), world market share is a good indicator of the competitiveness of an industry. Small sectors in terms of value of exports can be strong achievers in terms of world market share.

iii) **The fastest growing fruit juice in the short-term was the single fruit juices at 152.31%, while the fastest growing fruit juice in the long-term was grape juice at 29.5%.** According to Freudenberg and Paulmier (2005:38), sectors with rapid export growth in value terms are competitive in world markets, while stagnant or declining growth rates indicate poor competitiveness. High growth in exports of a product indicate potential worth analysing. Grapefruit juice experienced a decline in export growth, indicating that the juice type is reaching a point of declining demand despite the large market share.

iv) **South Africa is a large importer of grape juice, to the extent that it is a net importer of grape juice with a relative trade deficit of grape juice 12.29%.** Trade

balance as an indicator gauges the efficiency of the productive capacity of a sector; a trade surplus suggests that a sector has efficient productive capacity and can be considered competitive, while a trade deficit suggests the opposite. (Freudenberg & Paulmier, 2005:38). The trade deficit suggests that grape juice has inefficient productive capacity. Most of the juice types exported by South Africa exhibit a relative trade surplus indicating effective productive capacity and competitiveness.

After applying the indexing methodology of Freudenberg and Paulmier (2005; see Section 3.4.3.3), the South African Export Performance Index was determined by averaging the scores for each of the indicators. The South African Export Performance Index given in Table 3.5 shows the types of fruit juice for which South Africa has the best export performance.

Table 3.5: South African Export Performance Index

HS code	Product label	Index (1–5): SA's exports in value in 2008 (USD '000)	Index (1–5): share of SA's exports in world exports in 2008 (%)	Index (1–5): annual growth in value between 2007 and 2008 (% p.a.)	Index (1–5): annual growth in value between 2004 and 2008 (% p.a.)	Index (1–5): (X–M)/(X+M) in %	South African Export Performance Index
200910	Orange juice	3.10	1.22	2.44	3.09	4.22	2.81
200920	Grapefruit juice	3.69	5.00	1.00	1.09	5.00	3.16
200930	Single citrus fruit juice	2.51	2.26	5.00	5.00	4.95	**3.94**
200940	Pineapple juice	3.01	2.20	2.14	3.39	4.74	3.10
200950	Tomato juice	1.00	1.00	2.19	1.00	3.30	1.70
200960	Grape juice	3.54	1.89	3.04	3.12	1.00	2.52
200970	Apple juice	4.30	1.82	2.77	1.90	1.95	2.55
200980	Fruit and vegetable juice	5.00	1.40	2.83	1.72	3.76	2.94
200990	Mixtures of juices	4.55	1.62	2.30	2.55	4.93	**3.19**

Source: Adapted from Trade Map (2009)

From Table 3.5, the following can be concluded:

i) The juice types with the highest export performance were single citrus fruit juice and mixtures of juices with an index of 3.94 and 3.19, respectively. The good performance of these products clearly indicates that South Africa has the best export performance in these products.

ii) The South African Export Performance Index for grapefruit juice (3.16) and pineapple juice (3.10) demonstrates that these types of juice have a high level of export performance.

iii) Tomato juice has poor export performance, as the South African Export Performance Index was the lowest of all the fruit juice types at 1.70. The poor performance on this product demonstrates that it does not hold potential for export.

In this section, it was determined that South Africa has strong export performance for grapefruit juice and pineapple juice. The following section presents the analysis of fruit juice imports by the Middle East in order to determine the Middle East Import Index and identify the types of fruit juice demanded in the region.

3.4.3.5 Middle East Import Index

The Middle East Import Index measures the attractiveness of fruit juices in the Middle East by considering indicators mentioned in Section 3.4.3.2. The Middle East Import Index was developed from Trade Map (2009) and Market Access Map (2009) data. The Index measures the import propensity of fruit juices in the Middle East.

It must be borne in mind that for purposes of this study, the Middle East refers to Bahrain, Israel, Kuwait, Oman, Qatar, Saudi Arabia and the UAE (see Section 1.8). The imports of these countries were aggregated using Trade Map (2009) for each product. Table 3.6 shows the indicators that formed the index.

Table 3.6: Middle East Import Index indicators

HS code	Product label	Middle East imports in value in 2008 (USD '000)	Annual growth in value between 2007 and 2008 (% p.a.)	Annual growth in value between 2004 and 2008 (% p.a.)	Average tariff applied to SA (%)	Middle East exports in value in 2008 (USD '000)	(X–M)/ (X+M) in %
200910	Orange juice	68439	1059	38	7.98	71376	0.39
200920	Grapefruit juice	12436	35	8	6.91	56460	0.61
200930	Single citrus fruit juice	19342	1	22	5.79	37231	0.13
200940	Pineapple juice	15621	-5	20	4.29	4128	-0.63
200950	Tomato juice	1905	-14	8	5.00	536	-0.56
200960	Grape juice	7657	665	22	10.65	960	-0.67
200970	Apple juice	46258	-21	45	9.52	16671	-0.62
200980	Fruit and vegetable juice	99597	-21	17	4.80	131576	0.14
200990	Mixtures of juices	99989	-25	7	8.80	88958	-0.06

Source: Trade Map (2009)

From Table 3.6, the following can be concluded:

i) The largest imported juice types by the Middle East are fruit and vegetable juice, and mixtures of juices. Together their imports amounted to nearly USD200 million in 2008.

ii) The fastest growing juice types in the short-term (2007 to 2008) were orange juice (1059 per cent) and grape juice (665 per cent). The high growth in grape juice may suggest that the market is developing an appetite for this juice type, which may present export potential for a country should the production of this product be able to meet the demand. Freudenberg and Paulmier (2005:43) hold that high growth in demand of exporting products can produce net gains for an exporting country and the more growth is evident in the demand for a product in the global market, the higher the probability of future export growth.

iii) All of the juices exhibited growth in imports in the long-term. Apple juice and orange juice imports grew the most in the long-term, namely 45 and 38 per cent respectively.

iv) The Middle East exports a significant amount of fruit juices, particularly fruit and vegetable juice. The region is a net exporter of grapefruit juice, and a net importer of pineapple, grape and apple juices.

v) Grape juice (HS200920) imports from South Africa face the highest tariffs in the Middle East (10.65 per cent), followed by apple juice (HS200970; 9.52 per cent), while pineapple (HS200940; 4.29 per cent) and fruit and vegetable juice (HS200980; 4.8 per cent) face the lowest tariffs. Tariffs can present a major trade barrier to an industry and can even prevent export potential translating into real exports (Freudenberg & Paulmier, 2005:43–44). Should South African exporters still be able to export competitively despite the tariffs, strong juice types would retain high export potential.

After applying the indexing methodology of Freudenberg and Paulmier (2005), the Middle East Import Index was determined by averaging the scores of each of the indices. The Middle East Import Index indicates the types of fruit juice for which the Middle East has the highest import demand. This index is given in Table 3.7.

Table 3.7: Middle East Import Index

HS code	Product label	Index (1–5): Middle East imports in value in 2008 (USD '000)	Index (1–5): annual growth in value between 2007 and 2008 (% p.a.)	Index (1–5): annual growth in value between 2004 and 2008 (% p.a.)	Index (1–5): average tariff applied to SA (%) (inverse)	Index (1–5): Middle East exports in value in 2008 (USD '000)	Index (1–5): (X–M)/(X+M) in %	Middle East Import Index
200910	Orange juice	3.71	5.00	4.33	2.68	3.16	4.33	**3.87**
200920	Grapefruit juice	1.43	1.22	1.16	3.35	2.71	5.00	2.48
200930	Single citrus fruit juice	1.71	1.09	2.56	4.06	2.12	3.51	2.51
200940	Pineapple juice	1.56	1.07	2.44	5.00	1.11	1.13	2.05
200950	Tomato juice	1.00	1.04	1.14	4.55	1.00	1.33	1.68
200960	Grape juice	1.23	3.55	2.57	1.00	1.01	1.00	1.73
200970	Apple juice	2.81	1.02	5.00	1.71	1.49	1.13	2.19
200980	Fruit and vegetable juice	4.98	1.01	2.13	4.68	5.00	3.53	**3.56**
200990	Mixtures of juices	5.00	1.00	1.00	2.16	3.70	2.91	2.63

Source: Adapted from Trade Map (2009)

From Table 3.7, the following can be concluded:

i) The Middle East has the highest import propensity for orange juice (3.87), and fruit and vegetable juice (3.56).

ii) Tomato juice and grape juice demand in the Middle East is limited and demonstrates little potential for South African juice exports.

The following section combines the two indices, namely the South African Export Performance Index and the Middle East Import Index in order to determine the overall South African Export Potential Index. This section is aimed at identifying the type of fruit juice with the most export potential in the Middle East.

3.4.3.6 South African Export Potential Index

In this section, the South African Export Performance Index and the Middle East Import Index are combined and averaged in order to create the overall South African Export Potential Index. This index is used to determine the extent to which a country's export structure is adapted to world demand and which products have export opportunities in world markets (Freudenberg *et al.*, 2008a:26). For the purpose of this study, the overall South African Export Potential Index determines which types of fruit juice have the most export potential in the Middle East.

Table 3.8: South African Export Potential Index

HS code	Product label	South African Export Performance Index	Middle East Import Index	South African Export Potential Index
200910	Orange juice	2.81	3.87	**3.34**
200920	Grapefruit juice	3.16	2.48	2.82
200930	Single citrus fruit juice	3.94	2.51	**3.23**
200940	Pineapple juice	3.10	2.05	2.57
200950	Tomato juice	1.70	1.68	1.69
200960	Grape juice	2.52	1.73	2.12
200970	Apple juice	2.55	2.19	2.37
200980	Fruit and vegetable juice	2.94	3.56	**3.25**
200990	Mixtures of juices	3.19	2.63	2.91

Source: Adapted from Trade Map (2009)

From Table 3.8, the following can be concluded:

i) Orange juice has the highest export potential to the Middle East with an index of 3.34.

ii) Fruit and vegetable juice (3.25) and single citrus fruit juice (3.23) also have export potential to the Middle East.

iii) Tomato juice has very little export potential to the Middle East. This product had the lowest index at 1.43.

The methodology of Freudenberg *et al.* (2008a:26) was followed to map the products of the South African Export Potential Index into to four possible categories according to relative rankings of the South African Export Performance Index and the Middle East Import Index. From Table 3.8 and the categories, the following can be concluded:

- **High South African Export Performance Index, high Middle East Import Index:** This combination presents a good match between South Africa's exports and Middle East imports, suggesting a well-adapted demand with further export opportunities. Mixtures of juices had the highest combination, with the second highest Export Performance Index and the third highest Middle East Import Index.
- **High South African Export Performance Index, low Middle East Import Index:** For these products, South Africa has experienced strong export performance, but Middle Eastern demand is small, showing little growth, and/or market access conditions are not

particularly favourable. Pineapple juice falls into this category, with the fourth highest South African Export Performance Index and the third lowest Middle East Import Index.

- **Low South African Export Performance Index, low Middle East Import Index:** This combination shows very little export potential. Tomato juice falls into this category, with the lowest South African Export Performance Index and the lowest Middle East Import Index.
- **Low South African Export Performance Index, high Middle East Import Index:** This combination presents possible new export opportunities for South Africa and suggests a potential for export development to increase capacity. Orange juice falls into this category, with the fourth lowest South African Export Performance Index and the highest Middle East Import Index.

Orange juice and fruit and vegetable juice are the types of fruit juices with export potential to the Middle East using the composite South African Export Potential Index. The categorisation of Freudenberg *et al.* (2008a) determined that orange juice and mixtures of juice held export potential to the Middle East. The next section presents the findings of this chapter and draws conclusions regarding the product selection process.

3.5 Conclusion

From the results of the DSM (Viviers & Pearson, 2007), this chapter has demonstrated the process of selecting fruit juices as the product with the most export potential to the Middle East. A three-phase filtering process was discussed with the aim of eliminating products that meet the cluster requirements of Sakarya *et al.* (2006), namely similarity in demand across the markets in the region. The filtering process was conducted through the analysis of trade indicators and the development of indices according to Freudenberg and Paulmier (2005) and Freudenberg *et al.* (2008a). It was found that orange juice (HS200910) and mixtures of juices (HS200990) have the highest export potential to the Middle East. Orange juice had the highest score in the South African Export Potential Index, while mixtures of juices had the highest combination ranking in the South African Export Performance Index and the Middle East Import Index.

This chapter was concerned with determination of the product with the highest export potential in the Middle East. The next chapter will present the analysis that determined which Middle Eastern market has the highest potential for the export of South African fruit juice.

4. IDENTIFYING THE MIDDLE EASTERN MARKET WITH THE HIGHEST EXPORT POTENTIAL FOR FRUIT JUICE

4.1 Introduction

In Chapter 3, fruit juice was selected as the product with the highest export potential to the Middle East. In Section 3.4.3, it was determined that orange juice and mixtures of juices are the types of fruit juice with the highest export potential to the Middle East. In this section, the results of the analysis conducted on fruit juice and not on the type of fruit juice for export to the Middle East are given. This was done in order to ensure that the product and not subsidiaries of the product was analysed. In addition, fruit juice exporters have different kinds of juice within their product range and analysing all kinds of fruit juice would be of more value to fruit juice exporters than analysing a single type of juice.

As export potential of fruit juices to the individual markets in the Middle East differs, it was considered best to identify the country with the highest import potential. An exporter wishing to enter the region could use this country as a first point of entry into the Middle East. Therefore, the most attractive market in the Middle East was to be identified for fruit juice exports.

This chapter presents the two most attractive markets determined for the export of South African fruit juices to the Middle East. The most attractive markets were identified according to specific criteria within a composite index. The markets with the highest export potential according to this index were identified. In Chapter 5, a market profile for these markets will be discussed. The following section discusses the criteria for identifying a target market for fruit juice exports to the Middle East, using a market potential index.

4.2 Developing a market potential index

This section identifies the Middle Eastern country with the highest potential for the export of South African fruit juice. The methodology developed by the ITC (Freudenberg & Paulmier, 2005; Freudenberg *et al.*, 2008a) for the identification of potential markets was used to determine the export potential (see Section 3.4.3).

Freudenberg and Paulmier (2005) developed an index using various indicators to determine export performance and global import demand. These methodologies were combined and adapted specifically for the Middle East in this study.

Freudenberg *et al.* (2008b) determined the strength of production capacity, export performance, import dependency and world market trends in order to determine product sectors for development in Southern Africa. This methodology was applied and adapted in this study to determine the markets with the highest export potential for fruit juice in the Middle East.

The methodologies of Freudenberg and Paulmier (2005), Freudenberg *et al.* (2008b) and Freudenberg *et al.* (2008a) were combined to construct a composite index. The indices are the Middle East Market Attractiveness Index, Middle East Export Performance Index, and Middle East Production Index. These indices will therefore measure the fruit juice import trends of each of the Middle Eastern countries, the fruit juice export performance and fruit juice production. **A composite index was developed from the aggregate of the three indices**. The composite index determines the market potential of each of the Middle East countries in order to determine the market with the most export potential for South African fruit juice. The following section discusses the indictors used in the indices.

4.2.1 Determining indicators for a composite index

In this section, the indicators and the attributes required for the indicators used in the composite index are discussed. Freudenberg and Paulmier (2005:33–34) hold that a composite indicator is the sum of its variables, which could be selected on the basis of their analytical soundness, relevance and measurability. The availability of data is a constraint in developing an index. This can be due to statistical reporting inconsistencies or information not being quantifiable. Therefore, in determining indicators for identifying the most attractive market for export, it is important to find indicators that are quantifiable, measurable and comparable across markets.

The requirement that an indicator be comparable across markets is reiterated by Sakarya *et al.* (2006:212–213), who hold that the analysis of the markets in a cluster must use indicators that are comparable across all of the countries in the geographic region (see Section 3.3.3). Furthermore, Wood and Robertson (1999:36–39) hold that, bearing in mind the unique requirements of each industry, the indicators need to be quantifiable across all markets. This means that the trade indicators used for the identification of markets with the most potential for

export are available for all of the markets. Therefore, the indicators used in the indices must have information for all of the countries in the Middle East.

Market access conditions include both quantitative and qualitative information that is critical when determining the export potential of a market. In identifying the most attractive market, Freudenberg and Paulmier (2005:33–34) point out that although it is useful to consider both tariff barriers and non-tariff barriers, the latter does not lend itself to quantitative comparison. Therefore, in developing the indices for the Middle East, only the market access conditions that are quantifiable were used, i.e. tariff information. The next section discusses the converting of these indicators into indices.

4.2.2 Converting indicators into indices

The indicators were standardised or normalised before being aggregated into a composite indictor. The methodology of Freudenberg and Paulmier (2005:34) was used once again as a normalisation method according to which each indicator was converted into a range from 1 to 5 (see Section 3.4.3.3).

In the Middle East Market Attractiveness Index, the strongest performance was scored 5 and the weakest performance 1. In the Middle East Production Index and the Middle East Export Performance Index, the strongest performance was scored 1 and the weakest performance 5. The reason for this is that the South African exporter would wish to export to a market with a poor production and weak export potential of fruit juices. The next section describes the use of the indicators and indexing method described in this section to develop the first index in the composite market potential index, namely the Middle East Market Attractiveness Index.

4.3 Middle East Market Attractiveness Index

The Middle East Market Attractiveness Index was developed as part of the composite market potential index. The Middle East Market Attractiveness Index measured the import demand of fruit juice of each of the markets in the Middle East in order to determine which market holds the highest export potential for South African fruit juice.

Freudenberg and Paulmier (2005) and Freudenberg *et al.* (2008a) used a market attractiveness index to identify new markets for products in order to increase exports for the most promising

products in each product group. Freudenberg *et al.* (2008b:32–36) used an import index and a world market index to measure the reliance on imports of certain products of Southern Africa and to measure the world market trends of those products. The Middle East Market Attractiveness Index combined and adapted the methodologies used in these studies with the aim of determining the market in the Middle East with the highest import demand for and the fewest import restrictions on fruit juice.

There are nine indicators for fruit juice imports in the Middle East Market Attractiveness Index:

- imports from the world in value in 2008 in USD in thousand ('000);
- share in world imports in 2008 in per cent;
- annual growth in imported value between 2007 and 2008 in per cent;
- annual growth in imported value between 2004 and 2008 in per cent;
- quantity imported from the world in 2008 in tonnes;
- annual growth in quantity imported between 2004 and 2008 in per cent;
- average *ad valorem* equivalent tariff applied to the import of fruit juice from the top five non-Middle East fruit juice exporters to the region ***minus*** average *ad valorem* equivalent tariff applied to the import of fruit juice from South Africa, measured as a percentage ;
- relative trade balance in 2008, given as a percentage.

The indicators were compiled into the Table 4.1 using data from Trade Map (2009) and Market Access Map (2009). The indicator pertaining to the average *ad valorem* equivalent tariff applied to the import of fruit juice from the top five non-Middle East fruit juice exporters to the region was calculated using the Trade Map (2009) tool[3]. The tool allows the aggregation of import data for only the selected Middle East countries.

[3] Trade Map provides an aggregation tool for the user. The user specifies the products or countries that must be combined for aggregation.

Table 4.1: Middle East Market Attractiveness Index indicators

Country	World imports in value in 2008 (USD '000)	Share in world imports 2008 (%)	Annual growth in value between 2007 and 2008 (% p.a.)	Annual growth in value between 2004 and 2008 (% p.a.)	Quantity imported from world, 2008 (tonnes)	Annual growth in quantity between 2004 and 2008 (%)	Average tariff applied to SA (%)	Average tariff top 5 non-Middle East exporters (%)	Exports value in 2008 (USD '000)	Average tariff top 5 non-Middle East exporters *minus* average tariff applied to SA (%)	(X–M)/ (X+M) in 2008 (%)
Bahrain	3 991	0.03	4	37	3 122	30	5.00	4.00	657	-1.00	71.73
Israel	90 306	0.58	10	16	58 646	16	25.17	21.1	163 183	-4.09	-28.75
Kuwait	10 191	0.07	4	5	8 076	1	5.00	5.00	4 207	0.00	41.56
Oman	78 095	0.50	31	15	75 785	-20	5.00	5.00	575	0.00	98.54
Qatar	11 607	0.07	-12	6	12 756	10	5.00	5.00	12	0.00	99.79
Saudi Arabia	64 846	0.42	-1	25	35 748	7	5.00	5.00	116 190	0.00	-28.36
UAE	112 196	0.72	17	25	91 951	19	5.00	5.00	123 075	0.00	-4.62

Source: Trade Map (2009) and Market Access Map (2009)

From Table 4.1, the following can be concluded:

i) The largest importer of fruit juice in 2008 was the UAE, which imported USD112.1 million, followed by Israel at USD90.3 million.

ii) Oman had the highest growth in the value of imports in 2008 at 31 per cent however, considering the decline in growth of quantity imported between 2004 and 2008, it is evident that the growth in imports is attributed to an increase in prices.

iii) The UAE and Israel displayed the largest short-term growth in the value of imports of 17 and 10 per cent respectively.

iv) In terms of long-term growth in import value, the entire region experienced growth in fruit juice imports between 2004 and 2008. Bahrain had the highest growth in imports at 37 per cent.

v) The UAE (91,951 tonnes), Oman (75,785 tonnes) and Qatar (12,756 tonnes) imported the most fruit juice than any other country in the region.

vi) Annual growth in quantity between 2004 and 2008 demonstrates that Bahrain had strong growth in the fruit juice imported in tonnes at 30 per cent. This indicator shows which the countries in the region have strong and consistent imports despite fluctuations in price.

vii) Israel and Saudi Arabia had a positive relative trade balance of 28.7 and 28.3 per cent respectively – the highest in the region. This demonstrates that the two countries have the most efficient productive capacity for fruit juice in the region, and reduces the value of these two countries as export opportunities for South African fruit juice.

viii) Countries such as Qatar (99.79 per cent), Oman (98.54 per cent) had a negative relative trade balance, indicating inefficient productive capacity for fruit juice and consequently an opportunity for South African fruit juice to enter the market.

ix) The average *ad valorem* tariff applied to South Africa for fruit juice is the same across all of the countries at 5 per cent, except for Israel, where it is 25.27 per cent. The average *ad valorem* tariff applied to top five non-Middle East exporters indicated that Bahrain gave preference to those countries at 4 per cent, while Kuwait, Oman, Qatar, Saudi Arabia and the UAE applied the same tariffs as those applied to South Africa. Israel applied preferential tariffs to the top five non-Middle East exporters of 21.1 per cent.

The Table 4.1 provides insight into the import structure of fruit juice in the Middle East. However, the table does not provide clear identification of a market with the highest potential for export. The reason for this is that some markets are large import markets for fruit juice while other markets are growing importers of fruit juice. Therefore, the data in Table 4.1 was indexed into the Middle East Market Attractiveness Index in order to standardise the information and determine a conclusive market for the export of fruit juice.

After applying the indexing methodology of Freudenberg and Paulmier (2005; see Section 3.4.3.3) and the scoring methodology as given in Section 4.2.2, the Middle East Market Attractiveness Index was determined. The final score was the average of the indicators across each country. The countries with the highest index were regarded as markets with potential for South Africa to export fruit juice, while countries with a low index were regarded as markets with limited export potential for South Africa.

From Table 4.2, the following can be concluded:

i) The UAE and Oman were the most attractive markets for the export of South African fruit juice, with an index of 4.13 and 3.74, respectively.

ii) Kuwait and Qatar had the least export potential for fruit juice, with an index of 2.26 and 2.43, respectively.

Table 4.2: Middle East Market Attractiveness Index

Country	Index (1–5): world imports in value in 2008 (USD '000)	Index (1–5): share in world imports 2008 (%)	Index (1–5): annual growth in value between 2007 and 2008 (% p.a.)	Index (1–5): annual growth in value between 2004 and 2008 (% p.a.)	Index (1–5): quantity imported from world in 2008 (tonnes)	Index (1–5): annual growth in quantity between 2004 and 2008 (%)	Index (1–5): Average tariff top 5 non-Middle East importers minus average tariff SA (inverse)	Index (1–5): (X–M)/(X+M) in 2008 (%)	Middle East market attractiveness index
Bahrain	1.00	1.00	2.49	5.00	1.00	5.00	4.02	4.13	2.95
Israel	4.19	4.19	3.05	2.38	3.50	3.88	1	1.00	2.90
Kuwait	1.23	1.23	2.49	1.00	1.22	2.68	5	3.19	2.26
Oman	3.74	3.72	5.00	2.25	4.27	1.00	5	4.96	**3.74**
Qatar	1.28	1.23	1.00	1.13	1.43	3.40	5	5.00	2.43
Saudi Arabia	3.25	3.26	2.02	3.50	2.47	3.16	5	1.01	2.96
UAE	5.00	5.00	3.70	3.50	5.00	4.12	5	1.75	**4.13**

Source: Adapted from Trade Map (2009) and Market Access Map (2009)

It can also be observed from Table 4.2 that although there is a clear indication for the UAE as a potential export market of fruit juice, the strong potential for Saudi Arabia, Bahrain and Israel requires further analysis of the potential export markets. This is compounded by the fact that the UAE is a major exporter of fruit juice to other Middle East countries, exporting USD47.6 million in 2007 to the region, and is the twentieth largest fruit juice exporter in the world (Trade Map, 2009). The next section presents the measured export performance of the countries in the Middle East in order to determine the strength of their exports of fruit juice.

4.4 Middle East Export Performance Index

In this section, the measurement of the export performance of the Middle East countries is detailed using the Middle East Export Performance Index. The index forms part of the composite market potential index. The Middle East Export Performance Index measured the strength of the Middle East countries global export of fruit juice in order to determine which markets pose a threat to South African exporters of fruit juice. The index identified those markets with the highest potential for the export of fruit juice as those markets with the weakest export performance.

The Middle East Export Performance Index was developed using Trade Map (2009) data and measured the trade performance of the Middle East countries in fruit juice. The indicators of the Middle East Export Performance Index are:

- value exported in 2008 in USD in thousand ('000);
- share in world exports in per cent;

- annual growth value between 2007 and 2008, and 2004 and 2008, in per cent; and
- relative trade balance in per cent.

Table 4.3: Middle East Export Performance Index indicators

Countries	Value exported in 2008 (USD '000)	Share in world exports (%)	Annual growth in value between 2007 and 2008 (%)	Annual growth in value between 2004 and 2008 (%)	World imports in value in 2008 (USD '000)	Relative trade balance (X–M)/ (X+M) in 2008 (%)
Bahrain	657	0.00	4 954	-5	3 991	-71.73
Israel	163 183	1.09	74	31	90 306	28.75
Kuwait	4 207	0.03	51	29	10 191	-41.56
Oman	575	0.00	-48	-50	78 095	-98.54
Qatar	12	0.00	-70	-27	11 607	-99.79
Saudi Arabia	116 190	0.78	34	27	64 846	28.36
UAE	123 075	0.82	110	75	112 196	4.62

Source: Trade Map (2009)

From Table 4.3, the following can be concluded:

i) Israel was the largest exporter of fruit juice in the Middle East, exporting USD163 million in 2008. Qatar and Oman were the smallest exporters in the region, with Qatar exporting USD12,000 and Oman exporting USD575,000 in 2008.

ii) The region holds a 2.72 per cent share of world exports of fruit juice, with Israel accounting for more than half with a 1.09 per cent share of world exports of fruit juice.

iii) Qatar and Oman had the largest decrease in fruit juice exports in value in 2008 at 70 and 48 per cent respectively. Bahrain had the largest increase in fruit juice exports in value at 4954 per cent in 2008.

iv) Oman and Qatar had the largest decrease in fruit juice exports in value between 2004 and 2008 at 50 and 27 per cent respectively. The UAE had the largest increase in fruit juice exports in value between 2004 and 2008 at 75 per cent.

v) Israel and Saudi Arabia had a positive relative trade balance of 28.7 and 28.3 per cent respectively – the highest in the region. This demonstrates that the two countries have the efficient productive capacity for fruit juice in the region.

vi) Qatar and Oman had the largest relative trade deficits of 99.79 and 98.54, respectively. This indicates inefficient productive capacity for fruit juice and consequently an opportunity for South African fruit juice to enter the market.

From Table 4.3, it is clear that Israel is the country that poses the biggest threat to South African fruit juice exporters, owing to its strong global export performance. In addition, the UAE loses

its attractiveness as an export market despite being a large importer of fruit juice, owing to its strong global export performance. However, both Oman and Qatar have high export potential for fruit juice as a result of their poor export performance. Bahrain is also a strong contender as a market with high export potential with a weak export performance for fruit juice.

Therefore, in Table 4.3 the Middle East Export Performance Index was calculated by standardising the information in order to determine conclusively which market has the weakest global export performance and can be identified as a potential market for fruit juice exports. The index identified those markets with the highest potential for South African exports of fruit juice as those markets with the weakest global export performance.

After applying the indexing methodology of Freudenberg and Paulmier (2005; see Section 3.4.3.3) and the scoring methodology (see Section 4.2.2), the Middle East Export Performance Index was determined. The final score was the average of the indicators across each country. The countries with a high Middle East Export Performance Index were regarded as having export potential for South Africa because there is limited or no competition, while countries with a low Middle East Export Performance Index were regarded as having limited export potential for South Africa owing to potentially strong competition. Therefore, the Middle East Export Performance Index is an inverse index.

Table 4.4: Middle East Export Performance Index

Countries	Index (1–5): Value exported in 2008 (USD '000)	Index (1–5): share in world exports (%)	Index (1–5): annual growth in value between 2007 and 2008 (%)	Index (1–5): annual growth in value between 2004 and 2008 (%)	Index (1–5): relative trade balance (X–M)/ (X+M) in 2008 (%)	Middle East Export Performance Index (inverse)
Bahrain	4.98	5.00	1.00	3.56	4.13	3.73
Israel	1.00	1.00	4.89	2.41	1.00	2.06
Kuwait	4.90	4.89	4.90	2.47	3.19	4.07
Oman	4.99	5.00	4.98	5.00	4.96	**4.99**
Qatar	5.00	5.00	5.00	4.26	5.00	**4.85**
Saudi Arabia	2.15	2.14	4.92	2.54	1.01	2.55
UAE	1.98	1.99	4.86	1.00	1.75	2.32

Source: Adapted from Trade Map (2009)

From Table 4.4, the following can be concluded:

i) Oman and Qatar have the most export potential as markets with their high export performance indices of 4.99 and 4.85, respectively.

ii) Israel and the UAE have the lowest Middle East Export Performance Index at 2.06 and 2.3, respectively. These countries have limited potential as possible export markets for South African fruit juices, as their low Middle East Export Performance Index values suggest that their export capability is the strongest in the region. This poses a threat to South African exporters in attempting to enter the region.

It can also be observed from Table 4.4 that there is a clear indication that Israel and the UAE cannot be regarded as potential export markets for fruit juice. However, the results of the Middle East Market Attractiveness Index indicated that Bahrain has export potential for fruit juices (see Table 4.2). Furthermore, the results of Table 4.4 indicate that Kuwait has the third weakest export performance, including the market as a potential export market for fruit juice. The next element that needs to be determined is the production capacity in these markets in order to ascertain whether the poor export performance is a result of poor production capacity. Therefore, the next section measures the fruit juice production of the countries in the Middle East in order to determine the strength of their fruit juice production capacity.

4.5 Middle East Production index

In this section, the production efficiency of the individual countries in the Middle East as determined in order to establish which countries can supply enough fruit juice to sustain national demand is given. Should a market have a poor production capacity of fruit juice or insufficient supply to meet the national demand, the market was regarded as having export potential for South African fruit juice exports.

In Freudenberg *et al.* (2008b:20), the production index was developed to measure the production efficiency for the products in the Southern Africa region. In the study, the production efficiency was determined to evaluate the strength of supply of each sector in the region and whether it could support exports. In this section, the production efficiency of the Middle East countries was determined using the same methodology as Freudenberg *et al.* (2008b). However, the purpose was to determine whether the Middle East could supply enough of its own fruit juice in order to sustain national demand and eventually export.

In addition, the production efficiency in relation to South Africa was determined. Should a market produce fruit juice in the same volumes as South Africa, then it would be difficult for a

South African exporter to export to a market with the same level of supply. The optimal situation is for the markets in the Middle East to have production levels below that of South Africa.

The production index was developed using FAOSTAT (2009) data for fruit production. There is no available data for fruit juice production across all of the Middle East countries. As mentioned in Section 4.2.1, data needs to be available and indicators need to be comparable across all countries. Therefore, an alternative indicator was used and it was decided to use the production of fruit. Fruit is the primary input for fruit juice and therefore should the production of fruit be inadequate, it could be assumed that the production of fruit juice in the Middle East would also be inadequate. The most recent data available for fruit production was 2007.

The indicators of the production index are:

- production of fruit in tonnes for 2007;
- share of world fruit production in per cent in 2007;
- proportion of South African fruit production in per cent in 2007; and
- annual growth in production between 2006 and 2007 in per cent.

Table 4.5: Middle East Production Index indicators

Country	Production in 2007 (tonnes)	Share in world production in 2007 (%)	Proportion of SA production in 2007 (%)	Annual growth in production between 2006 and 2007 (%)
Bahrain	20 580	0.004	0.34	8.0
Israel	1 377 984	0.248	23.01	4.8
Kuwait	15 458	0.003	0.26	-8.8
Oman	299 022	0.054	4.99	0.0
Qatar	22 594	0.004	0.38	0.0
Saudi Arabia	1 664 069	0.300	27.78	1.4
UAE	784 700	0.141	13.10	0.6

Source: FAOSTAT (2009)

From Table 4.5, the following can be concluded:

i) Saudi Arabia and Israel were the largest producers of fruit in the region in 2007, producing 1.6 million and 1.3 million tonnes, respectively. Kuwait and Bahrain produced the least fruit in the region at 15,458 and 22,594 tonnes, respectively.

ii) Kuwait had the smallest share of world production in 2007 at 0.003 per cent, followed by Bahrain and Qatar at 0.004 per cent. In general, the Middle East is a poor producer of fruit, producing only 0.754 per cent of the world's fruit.

iii) The Middle East as a region produced 69.86 per cent of the amount of fruit South Africa produced in 2007. Kuwait produced only 0.26 per cent as much fruit as South Africa in 2007.

iv) The low levels of fruit production indicate poor supply of fruit juice in the region for most of the countries. However, the growth rates of fruit production indicate that in countries such as Bahrain and Israel there was a strong growth in fruit output in 2007 at 8 per cent and 4.8 per cent respectively.

v) Oman and Qatar experienced almost no growth in the production of fruit in 2007, while Kuwait experienced an 8.8 per cent decline in the production of fruit.

From Table 4.5, it is clear that Kuwait had the weakest production capacity, followed by Qatar. Considering only these indicators there is an evident case for the export potential of fruit juice to Kuwait, however the data in Table 4.5 were indexed into the production index in order to standardise the information. The results of this process are given Table 4.6. The reason for this is that the composite market potential index requires the development of the production index.

After applying the indexing methodology of Freudenberg and Paulmier (2005; see Section 3.4.3.3) and the scoring methodology as given in Section 4.2.2, the Middle East Production Index was determined. The final score was the average of the indicators across each country. The countries with the highest production index were regarded as having export potential for South Africa, while countries with a low production were regarded as having limited export potential for South Africa.

Table 4.6: Middle East Production Index

Country	Index (1–5): production in 2007 (tonnes) (inverse)	Index (1–5): share in world production, in 2007 (%) (inverse)	Index (1–5): proportion of SA production, in 2007 (%) (inverse)	Index (1–5): annual growth in production between 2006 and 2007 (%) (inverse)	Middle East Production index (inverse)
Bahrain	4.99	4.99	4.99	1.00	3.99
Israel	1.69	1.69	1.69	1.76	1.71
Kuwait	5.00	5.00	5.00	5.00	**5.00**
Oman	4.31	4.31	4.31	2.90	3.96
Qatar	4.98	4.98	4.98	2.91	**4.46**
Saudi Arabia	1.00	1.00	1.00	2.58	1.40
UAE	3.13	3.13	3.13	2.76	3.04

Source: Adapted from FAOSTAT (2009)

From Table 4.6, the following can be concluded:

i) Kuwait received a high result with a production index of 5, indicating that of all the Middle East countries, it has the poorest production capacity for fruit and ultimately fruit juice.

ii) Qatar, Bahrain and Oman had high indices for the production index at 4.46, 3.99 and 3.96, respectively, indicating that these countries also have poor production capacity of fruit.

It can also be observed from Table 4.6 that Kuwait had the weakest production capacity of fruit and ultimately fruit juice. This indicates that Kuwait is a potential export market for fruit juice. In Table 4.2, Kuwait received the lowest index in the Middle East Market Attractiveness Index. Therefore, the Middle East Production Index alone is not sufficient reason for identifying Kuwait as the market with the highest export potential for fruit juice.

The Middle East Export Performance Index and Middle East Production Index excluded the UAE, the market with the highest export potential according to the Middle East Market Attractiveness Index, as a potential export market for fruit juice. Oman, Bahrain and Saudi Arabia were regarded as markets with export potential for fruit juice according to the index. The case for Oman was strengthened by Middle East Export Performance Index, which indicated that the market had the lowest export performance for fruit juice.

The mixed results of the individual indices demonstrates the importance of aggregating the indices into a composite indicator. Therefore, the next section details the aggregation of the indices into the composite Middle East Market Potential Index in order to identify the markets with the most export potential for fruit juice.

4.6 Middle East Market Potential Index

This section describes the aggregation of the Middle East Market Attractiveness Index, the Middle East Export Performance Index and the Middle East Production Index into the composite Middle East Market Potential Index. The composite market potential index was used to identify the Middle Eastern market with the highest export potential for fruit juice.

The results of the indices for the Middle East Market Attractiveness Index (see Section 4.3 and Table 4.2), the Middle East Export Performance Index (see Section 4.4 and Table 4.4), and the

Middle East Production Index (see Section 4.5 and Table 4.6) were aggregated into the composite Middle East Market Potential Index. The composite index merged the results of the indices into a meaningful result in order to identify the market with the most export potential for fruit juice in the Middle East.

Table 4.7: Middle East Market Potential Index

Country	Middle East Market Attractiveness Index	Middle East Production Index	Middle East Export Performance Index	Composite Middle East Market Potential Index
Bahrain	2.95	3.99	3.73	10.68
Israel	2.90	1.71	2.06	6.67
Kuwait	2.26	5.00	4.07	11.33
Oman	3.74	3.96	4.99	12.69
Qatar	2.43	4.46	4.85	11.75
Saudi Arabia	2.96	1.40	2.55	6.91
UAE	4.13	3.04	2.32	9.49

Source: Adapted from Trade Map (2009), Market Access Map (2009) and FAOSTAT (2009)

From Table 4.7, the following can be concluded:

i) Oman was the Middle Eastern market with the highest export potential for fruit juices with an index of 12.69 followed by Qatar with an index of 11.75.

ii) Kuwait and Bahrain are also markets with export potential for fruit juice in the Middle East with an index of 11.33 and 10.68 respectively.

iii) Israel has the lowest export potential for fruit juice in the Middle East with an index of 6.67, which is almost half of the index of Oman.

iv) Comparatively, Saudi Arabia and the UAE are the lesser potential markets for fruit juice exports, with an index of 6.91 and 9.49, respectively.

The results of the Middle East Market Potential Index cannot be used in isolation to identify the country with the highest export potential for fruit juice. The following section identifies the markets with the highest export potential for South African fruit juice to the Middle East using both the composite index in this section and considers the results of the DSM.

4.7 Final selection of the Middle Eastern markets with the highest export potential of fruit juice

In this section, the final selection of the Middle Eastern markets with the highest export potential for fruit juice will be identified. The results of Table 4.7 (see Section 4.6) are considered along with the results of the DSM of Viviers and Pearson (2007) for fruit juice in the Middle East.

The results of the Middle East Market Potential Index (see Table 4.7) demonstrated that Oman and Qatar are the most attractive markets for fruit juice exports, followed by Kuwait and Bahrain. Israel, Saudi Arabia and the UAE were shown to be the markets with the lowest Middle East Export Performance Index; this was mainly as a result of the strong export performance of fruit juice of these countries. Only four out of the seven Middle East countries were identified as potential markets for the export of fruit juice in the DSM (Viviers & Pearson, 2007). These countries were Bahrain, Oman, Qatar and Saudi Arabia. This confirms the results of the index that Oman, Qatar and Bahrain are potential countries for exports of South African fruit juice.

It can also been seen from the results of the Middle East Market Potential Index (see Table 4.7) that Saudi Arabia can no longer be regarded as a market with the highest export potential for fruit juice. Furthermore, Bahrain was ranked the Middle East market with the fourth largest export potential of fruit juice according to the index. Therefore, for purposes of this study, the markets with the highest export potential of fruit juice are Oman and Qatar. The following chapter will provide market profiles for Oman and Qatar for the export of South African fruit juice.

5. MARKET PROFILES FOR THE EXPORT OF FRUIT JUICE TO OMAN AND QATAR

5.1 Introduction

The DSM of Viviers and Pearson (2007) identified realistic export opportunities for South Africa. One of the outcomes of the DSM was the identification of a geographical cluster for the countries with high export potential of which one was the Middle East. The DSM identified 360 product opportunities for the eight identified countries in the region. In Chapter 3, fruit juice was selected from the product opportunities of the DSM as the product that holds the highest export potential to the Middle East. More specifically, orange juice and mixtures of juices were identified as the types of fruit juice with the highest potential for export to the region (see Section 3.5). In Chapter 4, Oman and Qatar were identified as the markets with the highest export potential for fruit juice to the Middle East (see Section 4.7), and provide the first point of entry to the region for South African fruit juice exporters.

This chapter provides market profiles for the export of fruit juice to Oman and Qatar. Although orange juice and mixtures of juices were identified as the products with the highest export potential to the Middle East, the market profile focuses on all fruit juice. This is because the technical market information is provided for all fruit juice and is not specific to the type of fruit juice. However, there is specific mention of orange juice and mixtures of juices throughout the chapter in instances in which information is available. This chapter is divided into three parts: the first part is a general economic overview of each market, the second part is an overview of the fruit juices market in Oman and Qatar, and the third part provides technical market information on each market.

5.2 Economic overview of Oman and Qatar

5.2.1 Overview of Oman

This section presents an overview of the economy of Oman and the focus is on the size of the economy, economic growth and drivers of the economy. Exporters wishing to export to Oman should have a general understanding of the economy before attempting to approach any sector or sub-sector in the economy.

Table 5.1: Economic indicators of Oman

Indicator	2007	2008	2009	2010	2011	2012	2013
GDP, constant prices (OMR billions)	10.017	10.79	11.23	11.66	12.15	12.52	12.96
Real GDP growth (%)	7.738	7.77	4.06	3.79	4.2	3.03	3.56
GDP, current prices (OMR billions)	16.01	23.04	20.12	22.93	24.64	25.96	27.52
GDP, current prices (USD billions)	41.64	59.94	52.33	59.65	64.10	67.53	71.59
GDP per capita, constant prices (OMR)	3,651.98	3,898.59	4,018.47	4,131.29	4,264.25	4,351.83	4,463.98
GDP per capita, current prices (OMR)	5,836.78	8,322.89	7,196.99	8,125.78	8,648.57	9,025.11	9,475.92
GDP per capita, current prices (USD)	15,180.30	21,646.17	18,717.95	21,133.53	22,493.20	23,472.51	24,644.98
Inflation, average consumer prices (%)	5.89	12.61	3.32	2.96	2.83	2.46	2.23
Population (millions)	2.74	2.76	2.79	2.82	2.85	2.87	2.90

Source: IMF (2009)

From Table 5.1, the following can be concluded about the economy of Oman:

i) The nominal GDP of Oman was USD59.94 billion in 2008, which was a 43.9 per cent increase from USD41.64 billion in 2007. The Omani economy had real economic growth of 7.7 per cent in 2008.

ii) It is evident from the significant difference between nominal and real GDP growth that the record level oil prices experienced in 2008 resulted in the inflated nominal GDP.

iii) The Omani nominal GDP per capita reached USD21,646 in 2008, which was a 42.5 per cent increase from USD15,180 in 2007, while real GDP per capita grew by 6.7 per cent in 2008.

iv) The forecasts for 2009 to 2013 reveal that Oman will experience a cooling off in the economy from 2009, during which real economic growth will fluctuate between 4.2 and 3 per cent.

v) Real GDP per capita is expected to continue to grow year on year between 2009 and 2013, which signifies an increase in buying power of consumers in Oman.

vi) Consumer price inflation reached 12.6 per cent in 2008, which was an increase from the 5.89 per cent in 2007. This verifies that the high growth in the nominal GDP is because of the increase in oil prices.

vii) Inflation rates are forecast to decrease to levels between 2.46 and 3.32 per cent between 2009 and 2013. This, coupled with the rising real GDP per capita, is a clear sign that buying power of consumers will increase and provides an opportunity in the Omani market for exporters.

Exporters considering Oman as a target market can expect growth in the economy, sustained by the petroleum sector, which accounts for 50.7 per cent of the GDP of Oman in 2008 (Ministry of the National Economy, 2009). The petroleum sector of Oman grew by 63.5 per cent in 2008 to reach USD30.7 billion, largely because of record oil production and significant oil price increases. The non-petroleum sector contributed to the remaining 49.3 per cent of the Omani economy, reaching USD29.8 billion in 2008.

According to the Ministry of the National Economy of Oman (2009), the Omani economy has a relatively weak manufacturing industry, with the sector contributing to only 10 per cent of the national GDP. However, the manufacturing sector and the construction sector of Oman grew in 2008 by 40.5 and 44.2 per cent respectively. This signifies infrastructure expansion and expected growth in the economy.

Domestic demand, net imports and the size of private-sector employment were positive at the end of 2008 and the beginning of 2009. With wholesale and retail trade the largest driver of non-petroleum activities in Oman (Ministry of the National Economy, 2009), there might be opportunity for South African exporters wishing to take advantage of the growing demand and purchasing power in Oman.

The reliance of the Omani economy on the petroleum sector is compounded by the fact that Oman is a net exporter, with 77.5 per cent of its exports being mineral fuels and oils. Oman exported a total of USD37 billion in 2008, which was a 53 per cent increase from 2007. The growth in Oman's exports is a result of the growth in exports of mineral fuels and oils. Oman also exports vehicles, and electrical and electronic equipment. Oman exports mainly to China (29.3 per cent share of total exports), the UAE (10.9 per cent), and Japan (10.6 per cent; Trade Map, 2009).

In 2008, Oman's imports grew by 43 per cent to reach USD22 billion. The country primarily imports vehicles, which accounts for over a quarter of Oman's imports. Oman also imports machinery and electrical equipment, accounting for 16.9 and 6.6 per cent of Oman's imports in 2008, respectively. Oman mainly imported from the UAE (27.2 per cent of total imports) and Japan (15.6 per cent) in 2008. Oman was also a net importer of food and beverage products in 2008, amounting to USD2 billion, accounting for 9.8 per cent of total imports, while exporting only USD895 million (Trade Map, 2009).

The population growth expected in Oman along with the increased buying power of consumers can widen the trade deficit for food and beverage products. This is because the imports of these products are expected to increase to meet the growing demand. This presents an opportunity for South African exporters in the food and beverage industry and more specifically in the fruit juice industry.

From the analysis presented in this section, it is clear that Oman is a feasible market for South African exporters, owing to the size of its growing economy and growing consumer demand for imported products. Oman's limited capacity to supply the local consumer market is exacerbated by the domination of exports by petroleum and industrial goods. The inadequate agricultural sector in Oman was discussed in Section 4.5, in which it was noted that Oman has low fruit production.

Similar to this section, the next section presents an economic overview of Qatar. As with this section, there is a focus on the general economy.

5.2.2 Overview of Qatar

This section presents an overview of the economy of Qatar and the focus is on the size of the economy, economic growth and drivers of the economy. Exporters wishing to export to Qatar should have a general understanding of the economy before attempting to approach any sector or sub-sector in the economy.

Table 5.2: Economic indicators of Qatar

Indicator	2007	2008	2009	2010	2011	2012	2013
GDP, constant prices (QAR billions)	119.52	139.12	155.07	183.79	208.00	215.05	222.33
Real GDP growth (%)	15.34	16.39	11.46	18.52	13.17	3.3	3.38
GDP, current prices (QAR billions)	258.59	372.37	336.85	466.57	556.71	587.17	621.92
GDP, current prices (USD billions)	71.04	102.30	92.54	128.18	152.94	161.31	170.85
GDP per capita, constant prices (QAR)	128,496.90	126,748.76	127,281.90	135,907.03	138,565.93	129,066.17	119,137.71
GDP per capita, current prices (QAR)	278,000.38	339,262.74	276,480.96	345,009.10	370,865.33	352,394.25	333,255.18
GDP per capita, current prices (USD)	76,373.73	93,204.05	75,956.30	94,782.72	101,886.08	96,811.60	91,553.62
Inflation, average consumer prices (%)	13.76	15.04	0	3.97	4.04	3.47	3.51
Population (millions)	0.93	1.09	1.21	1.35	1.50	1.66	1.86

Source: IMF (2009)

From Table 5.2, the following can be concluded about the economy of Qatar:

i) The nominal GDP of Qatar was USD102.3 billion in 2008, which was a 43.6 per cent increase from USD71 billion in 2007. The Qatari economy had real economic growth of 16.3 per cent in 2008.

ii) It is evident from the significant difference between nominal and real GDP growth that the record level oil prices experienced in 2008 resulted in the inflated nominal GDP of Qatar.

iii) The Qatari economy is forecast to continue growing at double-digit rates until 2012, when growth is expected to slow down to 3.3 per cent.

iv) Nominal GDP per capita grew by 22 per cent to reach USD93,204 in 2008 and is expected to peak in 2011 at USD101,886.

v) The real GDP per capita is expected to grow with the real economy until 2011, when a reduction in real GDP per capita will be experienced.

vi) Real and nominal GDP per capita growth from 2009 to 2013 is largely affected by the growth in the population, which will increase by 53.7 per cent from 2009 to 2013.

vii) The Qatari economy recorded double-digit consumer price inflation in 2008, with inflation reaching 15.04 per cent. The high inflation rates experienced can be attributed to the high oil prices. Inflation levels are expected to fluctuate at approximately 4 per cent between 2010 and 2013.

Qatar has the second highest per capita income in the world (World Fact Book, 2009) which means that the relatively small population of Qatar has a large disposable income. Furthermore, Qatar is ranked 33 out of 182 in the Human Development Index of 2009 (UNDP, 2009), which indicates that the level of equality and development in the country is comparable to the world's most developed countries. The expected reduction in inflation (see Table 5.2) and the already high per capita income indicates that the real per capita income of consumers in Qatar will increase significantly. This means that opportunistic exporters of consumer goods may have an opportunity to export to Qatar.

It is estimated that Qatar will invest over USD120 billion in the development of the energy and industrial sectors in the country, as well as USD50 billion in roads, infrastructure development, housing and real estate, health/medical and sanitation projects between 2007 and 2017 (Department of Commerce, 2007:2). These developments in the economy will stimulate growth in the economy and further increase the income of consumers. Also, these infrastructure

developments will improve the quality of infrastructure, which could reduce transport costs in Qatar.

The Qatari economy is dominated by activities related to the oil and gas sector, which accounted for 59.1 per cent of GDP in 2008 reaching USD393 billion (Qatar Statistics Authority, 2009). Agriculture is the weakest industry in Qatar, contributing to less than 1 per cent of the GDP in 2008 at USD720 million (this was also seen in Table 4.5). The finance, insurance, real estate and business services industry in Qatar contributed to almost 10 per cent of the GDP and grew by 16.18 per cent in 2008 to reach USD72 billion (Qatar Statistics Authority, 2009). The improvement in the insurance and business services industry is a welcome improvement for exporters who rely on insurance and business services in effecting business transactions.

Qatar is a net exporter with exports amounting to USD54 billion in 2008, which was a 31 per cent increase from 2007. Qatar has poor diversification of exports, with mineral fuels and oils contributing to 92.3 per cent of total exports in 2008. Qatar also exports plastics, chemicals, and vehicles. The main importers of Qatar's exports in 2008 were primarily from East Asia, namely Japan (34.3 per cent share of total exports), Republic of Korea (21.8 per cent) and Singapore (11.7 per cent; Trade Map, 2009).

The total imports of Qatar grew by 19 per cent to reach USD27 billion in 2008. Qatar has a more diversified import profile than Oman; however, most imports are capital goods and vehicles. Machinery imports accounted for 23.8 per cent of total imports in 2008, followed by articles of iron and steel (14.3 per cent), electrical and electronic equipment (13.7 per cent) and vehicles (12.5 per cent). Qatar is also a net importer of food and beverage products, importing USD1.5 billion in 2008 and exporting only USD16 million. Qatar imports from a wide range of countries, and value that the country imports from these markets makes Qatar a diverse importing country. Qatar imports goods from Japan (9.6 per cent share of total imports), the US (9 per cent), Germany (8.4 per cent), Italy (7.4 per cent) and China (7.2 per cent; Trade Map, 2009).

The oil-dominated structure of exports in Qatar is a reflection of the homogenous production capacity in the country, which is further compounded by the diverse import profile of Qatar. Although Qatar primarily trades in industrial and capital goods, the 94:1 ratio of food and beverage imports to exports demonstrates the reliance of imported food and beverages by Qatar. The economy of Qatar is a feasible market for South African exporters, owing to the size of its growing economy and wealthy consumer base. The reliance of Qatar on food and beverage

imports clearly indicates that there is an opportunity for South African food and beverage exporters and more specifically fruit juice exporters.

This section concludes the first part of the chapter, which provided an economic overview of Oman and Qatar. The next section investigates the demand for food and beverages in Oman and Qatar, focusing on the demand for fruit juice.

5.3 Demand for fruit juice in Oman and Qatar

5.3.1 Demand for fruit juice from the global market

The analysis of the demand for fruit juice in Oman and Qatar is presented in this section. In Sections 5.2.1 and 5.2.2, it was established that Oman and Qatar have a high demand for imported food and beverages as a result of poor production capacity. This section discusses the demand for fruit juice in Oman and Qatar from international suppliers.

In the Middle East Market Attractiveness Index (see Section 4.3 and Table 4.1) using Trade Map (2009) trade data, it was found that Oman and Qatar are net importers of fruit juice. The value of fruit juice imported by Oman amounted to USD78 million and 75,785 tonnes, while the value of fruit juice exported amounted to USD575,000 in 2008. The value of fruit juice imported by Qatar amounted to USD11.6 million and 12,756 tonnes, while the value of fruit juice exported amounted to only USD12,000 in 2008. As Oman and Qatar are net importers of fruit juice, it is important to determine the major sources of the fruit juice imported by these markets. The top ten exporters to Oman and Qatar are listed in Table 5.3.

From Table 5.3, the following can be concluded:

i) Oman imported USD45 million of its fruit juice from the UAE in 2008, accounting for almost 60 per cent of Oman's total fruit juice imports.

ii) Qatar imported USD3.5 million of its fruit juice from the UAE in 2008, accounting for 30.7 per cent of Qatar's total fruit juice imports.

iii) The cheapest export unit price of fruit juice to Oman was charged from Lebanon at USD744 per unit, followed by Thailand at USD776 per unit. The most expensive fruit juice was exported from the EU countries such as Germany (USD2918 per unit), the Netherlands (USD2279) and Belgium (USD2065).

iv) The cheapest export unit price of fruit juice to Qatar was charged from the UAE at USD735 per unit, followed by Kuwait at USD730 per unit. The most expensive fruit juice was exported from Bahrain at USD2509 per unit and the US at USD2285 per unit.

v) The largest non-Arab exporter of fruit juice to Oman was the Netherlands, exporting USD1.1 million in 2008. The US was the largest non-Arab exporter to Qatar, exporting USD1.04 million.

vi) Although Oman and Qatar share common Arab juice import markets, Oman's non-Arab imports of fruit juice are from the EU, while Qatar's non-Arab imports of fruit juice are from Asia, South America and Africa.

Table 5.3: Top ten exporters of fruit juice to Oman and Qatar

Oman import of fruit juice				Qatar import of fruit juice			
Exporters	Trade indicators			Exporters	Trade indicators		
	Imported value 2008 (USD '000)	Share in Oman's imports (%)	Unit price (USD/unit)		Imported value 2008 (USD '000)	Share in Qatar's imports (%)	Unit price (USD/unit)
UAE	45976	58.9	1194	UAE	3564	30.7	735
Saudi Arabia	26784	34.3	807	Saudi Arabia	2667	23	997
Netherlands	1135	1.5	2279	Kuwait	1881	16.2	730
India	714	0.9	888	US	1049	9	2285
Lebanon	613	0.8	744	Thailand	492	4.2	1017
Kuwait	477	0.6	1112	Philippines	335	2.9	1530
Belgium	380	0.5	2065	South Africa	278	2.4	965
Bahrain	291	0.4	1796	Bahrain	266	2.3	2509
Germany	248	0.3	2918	India	254	2.2	1198
Thailand	246	0.3	776	United Kingdom	105	0.9	1750

Source: Trade Map (2009)

The high imports of fruit juice from Arab countries could be a result of the Greater Arab Free Trade Area (GAFTA), which is a free trade area developed to stimulate intra-regional trade between members. According to Economic and Social Commission for Western Asia (ESCWA; 2008), Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and UAE are members of GAFTA. The free trade area abolishes tariffs on commodities of Arab origin. The effectiveness of GAFTA has been questioned because intra-regional trade has shown little growth since its inception and has been dominated by oil trade. It was stated that the reduction in tariffs is insufficient to increase intra-regional trade and the focus should be on production development, diversity of imports and the reduction of intra-regional transport costs. The production structure of GAFTA is the biggest

challenge to intra-regional trade, as Arab countries are reliant on food imports from non-Arab countries (ESCWA, 2008:15–16).

The world's largest exporter of fruit juice is Brazil, which exported 14.35 per cent of the world's fruit juices in 2008; however, neither Oman nor Qatar imports fruit juice from Brazil (Trade Map, 2009). This could indicate that the imports of fruit juices in Oman and Qatar are partial towards GAFTA members or the markets have a predisposition to Arab countries with little regard for competitive prices (which is highly likely considering cultural similarities).

The UAE exported fruit juice to Oman at USD1194 per unit and to Qatar at USD735 per unit (see Table 5.3). This means that although Oman imports fruit juice at a premium price from the UAE, it still favours the nation as a supplier of fruit juice. Brazil could supply the Omani market at USD999 per unit, while South Africa supplies the market at USD788 (Trade Map, 2009). This means that there might be an opportunity for South Africa to export fruit juice to Oman. However, it would require that consumers be introduced to fruit juices from elsewhere in the world.

The cheapest exporter of fruit juice to Qatar was the UAE at USD735 (see Table 5.3). That the market is the largest supplier of fruit juice to Qatar could mean that the market for fruit juice is more responsive to prices and not merely biased towards GAFTA members, as seems the case with Oman. South Africa is also the cheapest non-GAFTA exporter of fruit juice to Qatar at USD965. This means that because of the responsiveness of the fruit juice market in Qatar to prices, there may be an opportunity for South Africa to be strong competition to the US, Thailand and the Philippines as a supplier of fruit juice to Qatar (see Table 5.3). The next section presents the analysis of the Omani and Qatari demand for fruit juice from South Africa

5.3.2 Demand for fruit juice from South Africa

In this section, the analysis of the demand for fruit juice from South Africa by Oman and Qatar is detailed. It was established that South Africa has untapped export potential to Oman and Qatar based on the analysis in chapter 4. According to Trade Map (2009), South Africa was the seventh largest exporter of fruit juice to Qatar at USD278,000 and the fourteenth largest exporter of fruit juice to Oman at USD145,000. Therefore, it was determined how South Africa could improve its exports to Oman and Qatar in order to meet the demand for fruit juice in those markets.

The South African Export Potential Index (see Section 3.5) established that the types of fruit juice with the highest export potential in the Middle East were orange juice and mixtures of juices. Therefore, the analysis presented in this section determines the extent to which South Africa exports these types of fruit juice to Oman and Qatar, and whether exports of those types of juice can be increased.

Table 5.4: Imports of fruit juice in 2008

Country	Oman				Qatar			
Product	Total imports (USD)	Share of total fruit juice imports (%)	Imports from SA (USD)	Share imported from SA (%)	Total imports (USD)	Share of total fruit juice imports (%)	Imports from SA (USD)	Share imported from SA (%)
2009: Fruit Juice	78 094 000	100.0	146 000	0.19	11 608 000	100.0	278 000	2.39
200910: Orange juice	9 690 000	12.4	46 000	0.06	769 000	6.6	30 000	0.26
200920: Grapefruit juice	141 000	0.2	---	0.00	203 000	1.7	---	0.00
200930: Single citrus fruit juice	999 000	1.3	---	0.00	1 181 000	10.2	27 000	0.23
200940: Pineapple juice	1 080 000	1.4	---	0.00	130 000	1.1	---	0.00
200950: Tomato juice	73 000	0.1	---	0.00	159 000	1.4	---	0.00
200961: Grape juice	337 000	0.4	18 000	0.02	159 000	1.4	---	0.00
200970: Apple juice	915 000	1.2	---	0.00	38 000	0.3	---	0.00
200980: Fruit and Vegetable juice	28 006 000	35.9	---	0.00	4 225 000	36.4	19 000	0.16
200990: Mixtures of juices	36 853 000	47.2	82 000	0.11	4 744 000	40.9	202 000	1.74

Source: Trade Map (2009)

From Table 5.4, the following can be concluded:

i) Oman's top imports of fruit juice in 2008 were mixtures of juices at USD36.9 million, fruit and vegetable juices at USD28 million, and orange juice at USD9.6 million.

ii) South Africa's only juice exports to Oman were mixtures of juices USD82,000, orange juice USD46,000 and grape juice USD18,000.

iii) Considering the Omani demand for fruit juice and South Africa's supply of fruit juice, it is clear that there is a relative match, in that the types of fruit juice supplied by South Africa are the types demanded in Oman.

iv) Qatar's top imports of fruit juice in 2008 were mixtures of juices at USD4.7 million, fruit and vegetable juices at USD4.2 million, and single citrus fruit juice at USD1.2 million

v) South Africa's largest exports of fruit juice in 2008 to Qatar were mixtures of juices at USD202,000 and orange juice at USD30,000.

vi) There is a good match between the types of fruit juice demanded by the Qatari market and those supplied by South Africa, in that the types of fruit juice supplied by South Africa are the types demanded in Qatar.

Although the South African Export Potential Index (see Section 3.5) did not identify fruit and vegetable juices as the product with the highest export potential to the Middle East, it is clear from Table 5.4 that there is a high demand for the product in both Oman and Qatar. According to the South African Export Performance Index (see Section 3.4.3.4 and Table 3.5), South Africa has the capacity (measured by exports) to export fruit and vegetable juices with an index of 2.94. This means that South Africa has the capacity to supply fruit and vegetable juices to Oman and Qatar.

The good match between the current supply of fruit juice by South Africa to Oman and Qatar for orange juice and mixture of fruit juice demonstrates that South Africa already has a "foot in the door" and that there might be an opportunity to increase exports to those markets. Furthermore, the capacity of South Africa to supply fruit and vegetable juices to Oman and Qatar means that the export promotion of this juice type would deepen the penetration of South African fruit juices in these markets.

In Section 5.3.1, it was found that South Africa has the opportunity to export to Oman if fruit juice exporters aggressively market fruit juice in order to ensure that consumers made even more aware of South African fruit juice. The price sensitive fruit juice market in Qatar requires that South African fruit juice exporters aggressively market fruit juice for its cost competitiveness and quality. Therefore, aggressive marketing could lead to the increased exports of orange juice, mixtures of juices, and fruit and vegetable juices from South Africa to Oman and Qatar. Also, competing with the UAE and other Arab countries could be a challenge for South African exporters. Due to similarities between the countries, a South African exporter should be made aware of and research the Middle Eastern culture to be able to offer incentives for rather doing business with South Africa.

The next section presents the analysis of the consumption of fruit juice in Oman and Qatar. This is done in order to gain a better understanding of fruit juice demand in each of the markets.

5.3.3 Consumption of fruit juice in Oman and Qatar

5.3.3.1 Consumption of fruit juice in Oman

This section presents the analysis of the consumption of fruit juice in Oman in order to gain a better understanding of the domestic trends concerning the consumption of fruit juice and determine whether there is a sustainable demand for fruit juices. In Oman, local fruit juice producers supply 55 per cent of the market while imports account for the remaining 45 per cent. Fruit juice consumption in Oman grew by 10.2 per cent in 2005 to reach 79.3 million litres and consumption is expected to reach 106.7 million litres in 2010. This is a 34 per cent increase in consumption over five years and a 6.1 per cent average annual growth. Fruit juice accounted for 18.6 per cent of soft drinks consumed in Oman in 2005 at 33 litres per capita, preceded by carbonated soft drinks and still bottled water (IMES Consulting, 2006:13).

In terms of retail value, fruit juice consumption in Oman amounted to USD61.9 million in 2005, which was a 11.3 per cent increase from USD55.6 million in 2004 (IMES Consulting, 2006:14). Comparing the growth in volume (litres) consumed, it is evident that the market experienced price increases in 2005. Fruit juices accounted for 30.9 per cent of soft drinks consumed in value terms in Oman in 2005, preceded by carbonated soft drinks (IMES Consulting, 2006:14). This means that fruit juice is relatively more expensive than other soft drinks in Oman.

The health concerns attached to carbonated soft drinks and the perception of fruit juice as a healthier alternative means that fruit juice may gain market share in the future. Soft drinks are banned in schools because of these health concerns, as well as fruit juice packaged in cans and glass bottles (IMES Consulting, 2006:10). This provides a possible opportunity for South African exporters producing fruit juice, particularly for young consumers.

In this section, it was determined that there is a growing market for fruit juice in Oman owing to increasing levels of consumption. Fruit juice is more expensive than carbonated soft drinks; however, government health concerns regarding carbonated soft drinks provides an opportunity for more suppliers of fruit juice to enter the market. This presents an opportunity for South African fruit juice exporters.

The next section presents the analysis of the consumption of fruit juice in Qatar. This is done in order to determine whether there is a sustainable local demand for fruit juice as was found for Oman in this section.

5.3.3.2 Consumption of fruit juice in Qatar

This section presents the analysis of the consumption of fruit juice in Qatar in order to gain a better understanding of the domestic trends regarding the consumption of fruit juice and to determine whether there is a sustainable demand for fruit juices. The average Qatari household spent USD9947 on food, drinks and tobacco per month in 2007, which was a 16.8 per cent increase from the USD8513 spent in 2001. In 2007, spending on food, drinks and tobacco accounted for 11.2 per cent of total household expenditure, in 2001 it accounted for 17.5 per cent (Qatar Statistics Authority, 2008:13). Consumption of alcohol is strictly regulated in Qatar and liquor permits have to be obtained by foreigners wishing to consume alcohol (Qatar Investment Promotion Department, 2009). This means that the high costs of alcoholic beverages may not affect the consumption basket for food, drinks and tobacco in Qatar.

Qatari households spent USD321 of their monthly household expenditure on mineral water and juices, which was 3.2 per cent of expenditure on food, drinks and tobacco (Qatar Statistics Authority, 2008:35). The high value of monthly expenditure on mineral water and juices demonstrates that the market for fruit juices is relatively large in Qatar. This means that South African exporters of fruit juice may be able to enter the market were the fruit juice products to be priced competitively (see Section 5.3.1).

It has been established that not only is there a high demand for internationally sourced fruit juice by both Oman and Qatar, but the demand of fruit juice in both countries is also growing as a result of large-scale consumer demand. Therefore, there is significant export potential in Oman and Qatar of South African fruit juice.

This concludes the second part of the chapter, which has presented the analysis of the fruit juices market in Oman and Qatar. The next section presents the technical market information pertaining to the export of South African fruit juices to Oman and Qatar.

5.4 Market access conditions for the export of fruit juice to Oman and Qatar

This section describes the market access conditions for the export of fruit juice to Oman and Qatar, focusing on tariff barriers. This is a particularly important consideration for exporters owing to the responsiveness of the consumer market to price changes in both countries but more specifically in Qatar (see Section 5.3.1). Any tariff barriers could adversely affect the price at which South African exporters can offer fruit juice to the markets and could reduce the comparative price advantage that South Africa has over its competitors.

The GCC Customs Union regulates tariffs between member and non-member countries. Oman and Qatar are members of the GCC. Member countries are to impose zero tariffs on imports from member countries in order to encourage intra-regional trade according to GAFTA (Department of Commerce, 2008:36; see Section 5.3.1).

Member countries are required to impose a five per cent *ad valorem* tariff on most imported products from non-member countries. This five per cent *ad valorem* tariff is applied to food products, which includes fruit juice. The tariff is applied to the CIF (Cost, Insurance and Freight) invoice value of the imported goods (Department of Commerce, 2008:36). According to Market Access Map (2009), Oman and Qatar impose a five per cent *ad valorem* tariff on all fruit juice types imported from South Africa (see Table 5.5). Oman and Qatar apply Most Favoured Nation (MFN) duties to fruit juice imported from South Africa. Therefore, South African fruit juice exporters have to ensure that the five per cent *ad valorem* tariff is considered in developing a pricing strategy for the Omani and Qatari markets in order to maintain a comparative price advantage.

Table 5.5: Tariffs applied to fruit juice imports from South Africa

HS code	Product description	Trade regime description	Oman	Qatar
			Total *ad valorem* tariff (%)	Total *ad valorem* tariff (%)
200910	Orange juice	MFN duties	5.00	5.00
200920	Grapefruit juice	MFN duties	5.00	5.00
200930	Single citrus fruit juice	MFN duties	5.00	5.00
200940	Pineapple juice	MFN duties	5.00	5.00
200950	Tomato juice	MFN duties	5.00	5.00
200960	Grape juice	MFN duties	5.00	5.00
200970	Apple juice	MFN duties	5.00	5.00
200980	Fruit and vegetable juices	MFN duties	5.00	5.00
200990	Mixtures of juices	MFN duties	5.00	5.00

Source: Market Access Map (2009)

The next section specifies the requirements for products to be imported by Oman and Qatar. The focus is on documentation required for goods to enter the markets.

5.5 Import requirements and documentation

This section specifies the requirements that fruit juice exporters need to comply with in order to ensure that a consignment passes through customs to enter the markets. The section focuses specifically on the documents required by customs. South African fruit juice exporters must ensure that they comply with these requirements and supply the correct documentation.

5.5.1 Import requirements and documentation in Oman

South African fruit juice exporters must ensure that the importer of fruit juice in Oman is registered with the Ministry of Commerce and is a member of the Oman Chamber of Commerce and Industry. This is because only Omani nationals and companies of World Trade Organisation (WTO) member countries that are duly registered as importers are permitted to submit documents to clear shipments through customs (Department of Commerce, 2008). Therefore, if the importer does not meet these requirements, the goods will not be cleared through customs.

In addition to the requirements of the importer regarding registration, exporters need to ensure that the following authenticated documentation is present with every consignment of fruit juice (and all food items) entering Oman (USDA, 2009:6–7):

- commercial invoice;

- packing list;
- bill of lading;
- health certificate;
- certificate of origin; and
- import permit from the respective ministry.

The authentication of all documents is required for the import of food products by Oman (Department of Commerce, 2008). All food consignments must be accompanied by a health certificate issued by the appropriate government agency in the country of origin that attests to the product's fitness for human consumption (USDA, 2009:5–6). Therefore, South African fruit juice exporters must ensure that all documentation is notarised by the Omani embassy in South Africa. This includes the health certificate issued by the South African Bureau of Standards (SABS, 2009).

5.5.2 Import requirements and documentation in Qatar

South African fruit juice exporters must ensure that the importer in Qatar is in possession of a valid import licence. All Qatari importers are required by law to have an import licence, which is issued only to Qatari nationals registered with the Ministry of Economy and Commerce. This regulation also applies to importers who are foreign-owned entities operating in Qatar (Department of Commerce, 2007).

In addition to the requirements of the importer regarding the import licence, the exporter needs to ensure that the following documentation is present with the consignment of fruit juice (and all food items) entering Qatar (USDA, 2009:7):

- commercial invoice;
- packing list;
- bill of lading;
- health certificate from the country of origin; and
- certificate of origin.

South African exporters of fruit juice must ensure that a health certificate is obtained from the SABS (2009). The invoice, health, and country of origin certificates must be notarised by the Qatari embassy in South Africa (USDA, 2009:7).

In this section, the import requirements have been detailed in order to ensure that South African fruit juice exporters duly comply with the regulations to ensure that the products are successfully cleared through customs to enter Oman and Qatar. The section looked specifically at the required documentation. The next section details the product-specific requirements of fruit juice imported by Oman and Qatar to ensure that the South African exporters comply with the standards and regulations of fruit juice.

5.6 Product-specific import requirements for fruit juice to Oman and Qatar

5.6.1 Standards and regulations

This section discusses the standards and regulations imposed on fruit juice imported by Oman and Qatar. Specific reference is made to GCC standards and regulations as they influence the requirements in Oman and Qatar regarding the import of fruit juices.

The GCC is a political and economic union between the six Arab States of the Persian Gulf (including Oman and Qatar) with the basic objectives of effecting coordination, integration and inter-connection amongst the member states. The objectives include the formulation of similar regulations related to the economy, finance, trade, legislation, customs and administration between the member states (Cooperation Council for the Arab States of the Gulf, 2009).

The Gulf Standards Organisation (GSO) regulates food and other standards in the GCC (USDA, 2009:2). Gulf Standards Organisation regulations for food standards include food labelling and packaging standards, shelf-life labelling standards, hygienic requirements, food additives standards and food contaminants standards (Bin-Fahad, 2007). Gulf Cooperation Council standards are only applied in member states once they have officially been adopted by the country as a standard; otherwise, the member state applies its own national standard to food. Oman and Qatar unified their standards with those of the GCC by officially adopting the GSO standards.

The GSO has specifically developed standards for the labelling and shelf-life labelling of food products, including fruit juice. The GSO 9/2007 is the standard for labelling and the GSO 150/2007 is the standard for shelf-life labelling (Department of Commerce, 2008). These GSO standards are applied by Oman and Qatar to all food products. Therefore, South African fruit

juice exporters must ensure that they meet the GSO standards for the labelling and shelf-life labelling of fruit juice when exporting to Oman or Qatar.

Although the GCC regulations have been adopted by Oman, it is important to ensure there are no additional standards for labelling in Oman. The Ministry of Commerce and Industry (MOCI), more specifically the Directorate for Specifications and Measurements, is responsible for formulating food safety regulations and standards (USDA, 2009:3). It is advised that South African fruit juice exporters contact the Ministry or the Omani Embassy in order to ensure that there are no additional standards for fruit juices that have recently been implemented.

In Qatar, the General Organisation of Standards and Metrology is the standards organisation responsible for food safety regulations and the Food Control Division of the Food Control Committee is responsible for the enforcement of food safety regulations (USDA, 2009:3–4). Although Qatar has formally adopted the GSO standards, it is advised that South African fruit juice exporters contact the General Organisation of Standards and Metrology or the Qatari Embassy in order to ensure that there are no additional standards for fruit juices that have recently been implemented.

In this section, it was shown that Oman and Qatar apply GCC regulations and standards to the labelling of fruit juice. However, both countries may apply additional regulations and standards. The next section details the requirements for the labelling of fruit juice in Oman and Qatar.

5.6.2 Labelling of fruit juice

This section details the labelling requirements of fruit juice in Oman and Qatar according to the GSO 9/2007. Any additional labelling requirements to those of the GCC applied in Oman and Qatar are included in this section. South African fruit juice exporters need to ensure that they comply with the GSO 9/2007 and any additional labelling requirements of Oman or Qatar.

According to the GSO 9/2007, food labels must be in Arabic and one of the languages on bilingual labels must be Arabic. Food labels must include the following information on the original label or primary packaging (Department of Commerce, 2008):

- product and brand name;
- country of origin;
- ingredients, in descending order of proportion;

- additives;
- origin of animal fat (for example, beef fat);
- net content in metric units (volume in case of liquids);
- production and expiry dates;
- the name and address of the manufacturer, producer, distributor, importer, exporter or vendor is to be declared on the label; and
- special storage, transportation and preparation instructions, if any.

Therefore, South African fruit juice exporters must ensure that they comply with the GSO 9/2007 by providing all of the required information on the fruit juice packaging in Arabic, or if it is a bilingual label in Arabic as the second language.

In order to ensure compliance with the GSO 9/2007, food inspectors in Oman and Qatar perform food label inspections in order to ensure that the product label accurately depicts the product. The inspection can be either visual or using a sample that is analysed in a laboratory. The inspection is random and takes place in the wholesale and retail markets regardless of the origin of the product. If a discrepancy is found, the product is removed from the market and destroyed at the expense of the supplier. In instances in which there is serious contravention of the labelling requirements, the product may be banned from the market for a specific period (USDA, 2009:5–6). South African exporters should expect that all fruit juice exported to Oman and Qatar will be inspected to verify that the label accurately depicts the product. The SABS conducts food testing for labelling (SABS, 2009) and it is advised that South African fruit juice exporters make use of the services of the official food standards authority.

In addition to food label inspections in the wholesale and retail markets, Oman requires that products shipped in bulk be accompanied by small, easy-to-handle samples for possible laboratory verification and that the sample container meet all the GCC labelling requirements (USDA, 2009). Therefore, South African fruit juice exporters must ensure that there is a sample for every type of juice in a consignment and that each sample meets the GCC labelling requirements.

Qatar encourages food exporters to obtain pre-approval of food labels prior the export of the product, particularly for products that are new to the Qatari market (USDA, 2009:3–4). This is because Qatari officials will work with companies to ensure that food and agricultural imports are not unduly disrupted or delayed at port of entry. Furthermore, laboratory analysis may delay

clearance of products for up to ten days, which may be at the expense of the exporter (USDA, 2009). South African fruit juice exporters should contact the Qatari embassy in order to obtain pre-approval for the fruit juice labels prior to exporting the products to Qatar.

In the event that consignments are rejected at the port of entry in Oman or Qatar for health or quality reasons, the consignment must be removed from the country within two weeks of arrival. The consignment can be returned to South Africa, re-exported to a non-GCC country, or destroyed by the customs officials in Oman or Qatar (USDA, 2009:7). The consequences of infringing the labelling requirements as set out according to the GSO 9/2007 are clear. South African fruit juice exporters must understand these consequences when seeking to comply with the labelling regulations.

5.6.3 Shelf-life labelling of fruit juice

This section describes the shelf-life labelling requirements of fruit juice exported to Oman and Qatar according to the GSO 150/2007. South African fruit juice exporters, who are required to adhere to the GSO 150/2007, must ensure that they comply with the labelling requirements when exporting to Oman and Qatar. Products requiring shelf-life labelling must adhere to these requirements, and any discrepancy in the date will lead to the rejection of the product or shipment at customs (USDA, 2009).

According to the GSO 150/2007, production and expiry dates must be engraved, embossed, printed or stamped directly onto the original label or primary packaging at time of production, using permanent ink. *Sell by*, *best before* or *use by date* may be used instead of *expiry date*. Stickers with printed date stamps are not permitted (USDA, 2009).

Fruit juice and other perishable products that have a shelf-life of three months or less are strictly required to adhere to the GSO 150/2007 and fruit juice with a shelf-life exceeding six months need only carry a *sell by* date (Department of Commerce, 2008). The Department of Commerce (2008) suggests that exporters work closely with importers in order to ensure compliance with local shelf-life requirements, as they are often difficult to interpret and implement. Therefore, South African fruit juice exporters need to determine whether there are shelf-life labelling requirements for their product and the relevant specific labelling requirements.

This section has described the standards and regulations required for the export of fruit juice to Oman and Qatar. The section has focused on the strict labelling requirements imposed in the markets. South African exporters will have to incur a cost to implement the changes necessary to meeting the requirements. These costs will affect the price of the fruit juice exported. The next section examines more factors that may affect the pricing of South African fruit juice exported to Oman and Qatar.

5.7 Factors influencing the pricing of fruit juice in Oman and Qatar

This section presents factors that affect the pricing strategy of South African exporters. According to the International Trade Institute of Southern Africa (ITRISA; 2007:164), exporters wishing to enter foreign markets need to be able to offer a competitive prices to importers in the market. The section examines common pricing practices in each of the countries that could influence the price at which South African exporters could offer fruit juice to consumers.

In Oman, the pricing formula for a product includes the cost of production, distribution, promotion and advertising, taxes and customs costs (Department of Commerce, 2008). South African fruit juice exporters must be able to factor in these costs when invoicing importers in Oman in order to ensure that they are offering competitive prices. Food product margins are typically 20 to 25 per cent for distributors, five per cent for wholesalers, and ten to 15 per cent for retailers in Oman (Department of Commerce, 2008). South African fruit juice exporters must consider the margins of each of the distribution channels and the effect that these would have on the price for consumers in deciding on a distribution channel.

The Qatari market is highly price sensitive owing to the large variety of local and foreign products available in the Qatari market. As a result, the Department of Commerce (2007) suggests that exporters work closely with local distributors to determine the most appropriate price strategy for the sensitive market. The average mark-up on food products is between ten and 15 per cent, while retail food prices are between 25 and 30 per cent above import prices (Department of Commerce, 2007). South African fruit juice exporters must be able to factor in the average mark-up on food prices when invoicing importers in Qatar in order to ensure that after the mark-up the prices offered to consumers are still competitive. Food product margins are 20 to 25 per cent for distributors, five per cent for wholesalers and ten to 15 per cent for retailers (Department of Commerce, 2007). South African fruit juice exporters must consider the margins

of each of the distribution channels and the effect that it would have on the price for consumers when deciding on a distribution channel.

According to the World Bank (2009), the cost of exporting to Oman is USD1037 and to Qatar is USD657[4]. Thus, exporting fruit juice to Oman is almost three times more expensive than exporting to Qatar. Exporters from South Africa need to consider these additional costs in determining the price of fruit juice in order to ensure price competitiveness. Dubai in the UAE is regarded as the port of choice for shipping in the Middle East and it is suggested that exporters consider this as an alternative point of entry into the region.

This section has discussed the factors in Oman and Qatar that affect the price competitiveness of South African fruit juice. The section has demonstrated the effect of the various players in the distribution channel on the price competitiveness of products. The next section describes the distribution channels in Oman and Qatar.

5.8 Distribution channels

This section describes the distribution channels available to South African fruit juice exporters in Oman and Qatar. The section examines the physical distribution of fruit juice (the movement of cargo) and the distribution of fruit juice using channels in the market such as retailers, wholesalers and agents. The importance of determining the most appropriate distribution channel is to ensure that the product reaches the market on time and intact (ITRISA, 2007:185).

5.8.1 Distribution channels in Oman

Oman has a well-developed transport infrastructure with two major ports – the Port Sultan Qaboos and the Port of Salalah – and road infrastructure linking all points in the country. Goods enter Oman mainly through Port Sultan Qaboos and overland from the ports in the UAE (Department of Commerce, 2008). According to the World Bank (2009), the number of days for a consignment to be imported by Oman is twenty-six days[5]. South African exporters should

[4] Cost measures the fees levied on a 20-foot container in USD and include all the costs associated with completing the procedures to export or import goods. These include costs for documents, administrative fees for customs clearance and technical control, customs broker fees, terminal handling charges and inland transport. The cost measure does not include tariffs or trade taxes.

[5] Time is recorded in calendar days. The time calculation for a procedure starts from the moment it is initiated and runs until it is completed. If a procedure can be accelerated for an additional cost, the fastest legal procedure is chosen. It is assumed that neither the exporter nor the importer wastes time and that each commits to completing

determine which port of entry has the lowest shipping costs and associated transport costs in deciding on the most appropriate port of entry.

Private supermarkets dominate retail food sales in Oman, holding an 80 per cent share of retail food sales (Department of Commerce, 2008); consequently, South African fruit juice exporters would most likely sell to private supermarkets. The distribution channel in Oman starts with the importer or agent selling to private supermarkets, institutional users and wholesalers. The wholesale market then sells directly to consumers, contractors, small supermarkets and restaurants. Importers and distributors are commonly used in the retail food business, with food processors and buyers in the hotel and restaurant industry importing directly or purchasing from local distributors (Department of Commerce, 2008). Therefore, South African fruit juice exporters would use an importer or agent to sell to private super markets. South African fruit juice exporters targeting the hotel and restaurant industry in Oman may export directly or use local distributors. Although it is no longer a legal requirement to use an agent, foreign companies distributing products in Oman prefer to use a local agent because they are commonly known as the first point of the distribution chain. In selling to the Omani government, agents are regarded as useful as Omani agents are able to scout for and bid on government tender opportunities (Department of Commerce, 2008).

An agreement between an exporter and an agent needs to be recorded in writing. The exporter may not unilaterally terminate the agreement except where there was an unjustifiable breach of agreement by the agent. Agents are required to register with the Registrar of Agents and Commercial Agencies of the MOCI, and agreements must be registered at the Oman Chamber of Commerce and Industry. The practical effects of this regulation on a foreign supplier are substantial in that the MOCI may prohibit the importation of goods and merchandise of suppliers that do not have an independent commercial agent registered in Oman (Department of Commerce, 2008).

It is evident from the above that South African fruit juice exporters should target private supermarkets in Oman and make use of an agent to secure an order from a private supermarket. It is necessary that the exporter ensure that there is an agreement with the agent and that the agreement has been duly registered.

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each remaining procedure without delay. Procedures that can be completed in parallel are measured as simultaneous. The waiting time between procedures - for example, during unloading of the cargo - is included in the measure.

5.8.2 Distribution channels in Qatar

Most food products imported by Qatar enter the country by truck from the UAE and enter the country at Abu Samra, which borders Saudi Arabia. The Doha seaport is becoming increasingly utilised for food products, while small quantities of fresh products are imported through Doha International Airport. Fresh produce products are usually cleared within twenty-four hours of arrival and most other food products within two to three days of arrival in Qatar (Department of Commerce, 2007). According to the World Bank (2009), it takes twenty days for a consignment to be imported by Qatar. South African fruit juice exporters should consult with their freight forwarders regarding the most appropriate shipping route and port of entry into Qatar in order to ensure that cost-effectiveness is maintained.

The government of Qatar is the biggest end user of products and services in the Qatari market, while private supermarket retails sales account for 60 per cent of Qatari retails sales (Department of Commerce, 2007). South African fruit juice exporters may wish to consult with an agent in order to determine the most feasible option between selling to the government and private supermarkets. In the distribution channel, the importer or agent sells to private supermarkets, cooperatives, institutional users, and wholesalers and convenience stores. Wholesalers sell directly to consumers, small supermarkets and restaurants (Department of Commerce, 2007).

Foreign companies conducting business in Qatar are legally required to have a local agent. Only Qatari nationals or companies entirely owned by Qatari nationals are permitted to be local commercial agents. Agency or representation agreements, signed and consented, must be registered with the Commercial Registration Department of the Ministry of Economy and Commerce (Department of Commerce, 2007). South African fruit juice exporters must ensure that they secure the services of an agent and that the agency agreement is registered prior to shipment of the goods to Qatar.

In this section, distribution channels have been examined in order to determine the ways to ensure the product is delivered to the location at which final consumers will purchase the product. The way to deliver the goods to the importer in Oman and Qatar was established. The next section examines the most common methods of payment in Oman and Qatar in order to ensure that the exporter receives payment for the delivery of the consignment of fruit juice.

5.9 Methods of payment in Oman and Qatar

This section discusses the most common methods of payment in Oman and Qatar in order to provide the exporter with a greater understanding of the financial system in these markets and the financial instruments most commonly used in international transactions. Methods of payment have varying degrees of risk (ITRISA, 2005:29); therefore, South African fruit juice exporters must be aware of the common methods of payment in Oman and Qatar in order to prepare for the ensuing risks or negotiate alternative methods of payment.

According to the World Bank (2009), Qatar is ranked 39 and Oman is ranked 65 out of 183 countries for ease of conducting business. Singapore was ranked the top country for conducting business and South Africa was ranked 34. Oman and Qatar received poor rankings for attaining credit, trading across borders[6] and enforcing contracts. This means that South Africa exporters must understand that there are risks associated with payment and enforcement of contracts in entering into international transactions with importers in Oman and Qatar.

Foreign companies dealing with Omani and Qatari importers are advised to perform due diligence checks before any binding transaction, owing to the absence of local credit rating agencies in both countries. It is important to determine whether the local company is sufficiently financially stable to meet financial obligations, and has a sound business and professional reputation (Department of Commerce, 2007).

In both Oman and Qatar, the most common form of payment is with a letter of credit (L/C); however, cash in advance and open account are also used but are highly dependent on the relationship between the buyer and seller. A documentary credit is not a commonly used method of payment (Department of Commerce, 2007; Department of Commerce, 2008). Considering the absence of local credit rating agencies in Oman and Qatar, South African fruit juice exporters should seek a L/C as the method of payment in any transaction with an Omani or Qatari importer.

5.10 Marketing of fruit juice in Oman and Qatar

This section provides an overview of the forms of marketing available to South African fruit juice exporters in Oman and Qatar. Understanding the forms of marketing most favoured by the

[6] Trading across borders includes considerations such as documentation, time and cost to import or export.

market enables the South African fruit juice exporter to prepare for the market more efficiently and adapt promotion materials accordingly.

In both Oman and Qatar, the most preferred method of direct marketing by exporters and local companies is supermarket promotions. The food retail sector makes extensive use of newspaper advertisements and inserts (Department of Commerce, 2007; Department of Commerce 2008). However, in Qatar, a local agent or distributor is required to market foreign products, as foreign companies are not allowed to market their products and services directly (Department of Commerce, 2007). Therefore, South African fruit juice exporters targeting private supermarkets should be prepared to assist with supermarket promotions of their products, through the provision of critical product information, samples of fruit juice or any required promotional material. South African fruit juice exporters should be prepared to provide agents with marketing material for newspaper advertisements and inserts.

The previous sections of this chapter has provided a considerable amount of information about Oman and Qatar. This information needs to be briefly summarised to capture the essence of the information. The next section summarises the information provided in the preceding sections in order to present the market profiles of Oman and Qatar.

5.11 Summary of the market profiles of Oman and Qatar

This chapter has presented the market profiles of Oman and Qatar for the export of South African fruit juice. Firstly, an economic overview of each market was given. Secondly, an overview of the fruit juice market in Oman and Qatar was given. Thirdly, technical market information on each market was provided.

In the first section, the economic overview (see Section 5.2), it was found that Oman and Qatar have similar economic structures, with both economies being very rich nations reliant on the petroleum sector. The countries have a poor agricultural base and as a result are net importers of food. Oman and Qatar have a large consumer market with a growing preference for fruit juice (see Section 5.3.3). This growing demand for fruit juice is supported by both local and foreign suppliers, with the largest foreign suppliers being the UAE and Saudi Arabia (see Table 5.3).

In the second section, overview of the fruit juice market (see Section 5.3), it was found that Omani and Qatari importers favour Arab fruit juice suppliers primarily because of GAFTA. It

was determined that Oman does not necessarily source fruit juice from the cheapest suppliers but is inclined to prefer Arab suppliers. Qatar is a highly price sensitive market and prefers to source fruit juice from the cheapest foreign supplier, i.e. the UAE (see Table 5.3). South Africa has a comparative price advantage in both markets, owing to the lower price offered in comparison to other foreign suppliers to the markets (see Section 5.3.1). It was also found that South Africa has the potential to increase its exports to Oman and Qatar for orange juice, mixtures of juices, and fruit and vegetable juice (see Section 5.3.2).

In the third section, technical market information (see Section 5.4), it was found that South African fruit juice exporters are subject to a five per cent *ad valorem* tariff, as applied to all fruit juice imported from non-GCC countries by Oman and Qatar. The GCC standards regulations are applied in Oman and Qatar regarding the labelling of fruit juices (see Section 5.6.1). The GSO 9/2007 regulates of labelling of fruit juices (see Section 5.6.2) and the GSO 150/2007 regulates the shelf-life labelling of fruit juices (see Section 5.6.3).

Oman and Qatar have strict import licensing and documentation requirements for the import of fruit juices (see Section 5.5), the requirements although similar have unique specifications in each country. Therefore, South African exporters need to ensure that those specifications are adhered to prior to exporting a consignment of fruit juice to either country.

The pricing strategy of South African exporters is largely affected by the type of distribution channel used (see Section 5.7) and the most common distribution channel in both markets is through an importer or distributor (see Section 5.8). In Oman, the use of an agent is not a legal requirement but it is regarded as essential to any exporter wishing to enter the market, while agents are legally required for all exports to Qatar.

South African fruit juice exporters should target private supermarkets in Oman and Qatar, as these retailers dominate the food retail sector, although in Qatar the government is the largest end user of goods and services in the market (see Section 5.8). Supermarket promotions are the most preferred form of marketing in Oman and Qatar, as well as newspaper advertisements and inserts (see Section 5.10). Direct marketing in Oman is possible; however, it is legally prohibited for foreign companies to market goods and services in Qatar directly.

The most preferred payment method for international transactions in Oman and Qatar is by a L/C (see Section 5.9). South African fruit juice exporters are warned of the risks associated with payment, owing to the absence of credit agencies in Oman and Qatar.

This section has provided a summary of the market profiles for the export of South African fruit juices to Oman and Qatar. This chapter concludes the analysis of the export opportunities in the Middle East. The next chapter will provide a summary of the preceding chapters and the study's main findings. It will also discuss the study's limitations and provide recommendations for further study.

6. SUMMARY OF THE STUDY, LIMITATIONS AND RECOMMENDATIONS

In this chapter, a summary of the study is provided that details the findings of the preceding chapters. Each chapter is briefly summarised and the most important aspect of each chapter is provided. This chapter also discusses the limitations of the study and provides recommendations for further study.

6.1 Summary of the chapters

In Chapter 1, it was indicated that this study was borne out of the need for a study on the Middle East to determine export opportunities to the region. This study was guided by the results of the DSM of Viviers and Pearson (2007). The necessity of the study arose from a combination of factors: the Middle East was one of the twelve geographic clusters resulting from the DSM, the introduction of the AGEG by the DTI to promote exports to the Middle East, and the current trade relationship between South Africa and the Middle East. Therefore, a study that analysed the region and determined the most realistic export opportunities from the results of the DSM was required. The information gained by such a study could be used by the government in promoting exports in the region.

In Chapter 2, the literature review was presented, which discussed the methods of determining export opportunities in foreign markets. The chapter analysed various product and market selection methods, focusing specifically on product and market selection within a geographic cluster. The most suitable indicators for quantitative product and market selection methods were also discussed in this chapter. The application of the findings of the product and market selection methods analysis was detailed in Chapters 3 and 4. The importance of information and the type of information preferred by exporters for making a decision to enter a foreign market was discussed in this chapter and the findings were applied in Chapter 5.

In Chapter 3, the product selection using a three-phase filtering process was described, through which products were eliminated according to set criteria. The product selection focused on analysing the products with the most export potential to the Middle East and was therefore a cluster-based selection. The products that were analysed in this chapter originated from the results of the DSM for the Middle East. Phase 1 consisted of a product/market matrix in order to determine the products with export potential to the most countries in the Middle East. Phase 2

consisted of a selection process using determined trade performance criteria. Phase 3 consisted of a selection process using the composite South African Export Potential Index. Fruit juice was selected from the product opportunities of the DSM as the product with the most export potential to the Middle East.

Chapter 4 detailed the market selection process followed in order to identify the market in the Middle East with the most export potential for the product identified in Chapter 3, i.e. fruit juice. The market selection focused specifically on the Middle Eastern markets identified as potential markets in the DSM. The composite Middle East Market Potential Index was used to determine the market with the most export potential. It was found that Oman and Qatar were the Middle East markets with the most export potential for fruit juice from South Africa.

The product-specific market profiles were described in Chapter 5 for the export of fruit juice to Oman and Qatar. The chapter provided an economic overview of the markets, an analysis of the market potential of the identified product in each market, and technical information on each market. Technical information was provided on the requirements with which exporters are to comply in order to enter each market, which focused on tariffs, import requirements and documentation, standards and regulations, price-influencing factors, distribution channels, methods of payment and the marketing of the product.

In Chapter 5, it was found that Oman and Qatar have similar economies, relying on the petroleum sector, and both countries are net importers of food. Both countries are members of GAFTA and consequently favour imports from member countries. South Africa was found to have a comparative price advantage in both markets, owing to the lower price offered in comparison to other foreign fruit juice suppliers to the markets. It was determined that South Africa has the potential to increase its exports of orange juice, mixtures of juices, and fruit and vegetable juice to the markets.

According to the findings in Chapter 5, South African fruit juice exporters face strict regulations from the GCC. Tariffs on fruit juice are five per cent *ad valorem* for non-GCC countries exporting to GCC countries such as Oman and Qatar. The GCC also has specific regulations pertaining to the labelling of fruit juice. Furthermore, there are strict documentation requirements for the import of fruit juice by Oman and Qatar.

In Chapter 5, the most common distribution channel in Oman and Qatar was identified as being through an importer or distributor. The pricing strategy of imported goods is affected by the type of distribution channel used. South African exporters should target private supermarkets in Oman and Qatar because these retailers dominate the food retail sector.

The next section discusses the limitations of the study. Based on these limitations, as well as the findings of this study, recommendations for further study are provided.

6.2 Limitations of the study and recommendations for further study

The biggest limitation of this study was the inadequate information on the relatively unknown markets such as Oman and Qatar. Pertinent websites were primarily in Arabic and were not translated into English. Specific information regarding the food and beverage industry in these markets is uncommon. Large research houses were contacted to establish whether information was available on either market in the food and beverage industry. Available research was usually conducted by consultants and based on primary research, which made the research inaccessible and/or expensive.

For South African exporters, particularly small-to-medium-sized exporters, the limited research, coupled with the cost of research, poses a serious threat. South African exporters would have to rely on outdated information or proceed with export strategies based on sporadic orders. The impact of limited available useful information on the export decisions of exporters may be worth investigation. Moreover, this demonstrates the importance of government export promotion authorities, such as the DTI, providing practical research and information on target markets.

Freudenberg and Paulmier (2005:36) mention that the limitations in the ITC studies were overcome by interviewing local stakeholders in foreign countries, industry experts and analysts. They also mention the importance of complementing statistical analysis with primary research, such as interviews. Cuyvers (1995:275) holds that gathering intelligence from primary sources within a market effectively contributes to better decision-making, emphasising the importance of supplementing statistical analysis. This study may have benefited from this type of primary research. However, access to experts with knowledge of these markets was limited. It is recommended that research on better known markets include surveys and interviews in order to supplement statistical analysis.

The final recommendation pertains to an alternative way of clustering the products in the Middle East. Initially the product/market matrix in Phase 1 (see Section 3.4.1) was based on whether the DSM identified the product as having export potential to a market in the Middle East. The products that proceeded to the next phase were those that had export potential in five or more markets. Instead, it is suggested that the cell classification used in Viviers and Pearson (2007), which classifies the products from 1 to 20 according to their relative market share, should be used. Cell 1 to 5 indicates a relatively small market share, cell 6 to 10 indicates an intermediately small market share, cell 11 to 15 indicates an intermediately high market share, and cell 16 to 20 indicates a relatively high market share.

According to Cuyvers (2004:267–271), products in cell 1 to 5 should not be the focus of active export promotion as the size of the market does not warrant expending limited resources on such limited opportunities; however, gathering and dissemination of information on these markets should take place. The products in cell 6 to 10 require extensive analysis of in-depth market information in order to determine the opportunities in the market and the resulting export promotion strategy. Cuyvers suggests a defensive export promotion strategy for products of cell 16 to 20 in order to maintain the large market share. Active export promotion (aggressive strategy) is recommended for products of cell 11 to 15 as they are regarded as opportunities for further expansion, owing to the growing market share.

Products with the market share creating the most lucrative environment for exports would be identified using the cell classification in the matrix and the criterion that the classification is between 6 and 15. Products with the classification from 1 to 5 and 16 to 20 are eliminated. This would result in more focused analysis of export value and growth in Phases 2.2 and 2.3 (see Sections 3.4.2.2 and 3.4.2.3) in determining the product with the highest export potential.

This section has provided recommendations resulting from this study. It was recommended that the impact of limited available useful information on the export decisions of exporters be investigated. Also, primary research should be used to complement statistical analysis of export potential of products and markets. Finally, an alternative way of clustering products, as in Phase 1 of this study, was recommended.

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ANNEXURE A: PRODUCT SELECTION TABLES

Table A.1: List of products identified in Phase 2.2: Export value 1998 to 2008

Export value 1998 to 2008 in South African Rand								
HS product	Bahrain	Israel	Kuwait	Oman	Qatar	Saudi	UAE	Number of countries with export values; 1998–2008
090240: Tea, black (fermented or partly) in packages > 3 kg	9226	295739	300357	39601	4602	91566	1526036	7
200919: Orange juice, not fermented, spirited, or frozen	23099	490247	22815	10167	24388	72331	615306	7
200921: Fruit juices (including grape must) and vegetable juices, unfermented and not containing added spirit, whether or not containing added sugar or other sweetening matter – grapefruit juice	3745	4245896	2419	1434	11395	13079	55645	7
200929: Fruit juices (including grape must) and vegetable juices, unfermented and not containing added spirit, whether or not containing added sugar or other sweetening matter – grapefruit juice	7133	16425408	6665	10014	11176	183932	376348	7
200949: Fruit juices (including grape must) and vegetable juices, unfermented and not containing added spirit, whether or not containing added sugar or other sweetening matter – pineapple juice	9419	2780340	7294	8694	11527	58157	192572	7
200961: Fruit juices (including grape must) and vegetable juices, unfermented and not containing added spirit, whether or not containing added sugar or other sweetening matter – grape juice (including grape must)	6231	15626	6201	1490	9392	92	40789	7
200969: Fruit juices (including grape must) and vegetable juices, unfermented and not containing added spirit, whether or not containing added sugar or other sweetening matter – grape juice (including grape must)	8636	42924	23423	19031	19407	2184262	628806	7
200979: Fruit juices (including grape must) and vegetable juices, unfermented and not containing added spirit, whether or not containing added sugar or other sweetening matter – apple juice	9195	212077	17810	7503	20981	2523915	424326	7
200980: Fruit and vegetable juice, not fermented or spirited	174683	3198952	99841	27018	139625	550639	2176292	7
200990: Mixtures of juices not fermented or spirited	129581	31828	122322	119699	120145	1440567	4106065	7
271290: Mineral waxes, n.e.s.	16	19480	125924	25229	46246	70035	35117	7
392620: Plastic apparel and clothing accessories	363	37854	58345	2687	21389	5680356	1002092	7
401590: Clothing and accessories except gloves, of rubber	57	7193	1920	440	644	76	8693	7
442190: Wooden articles, n.e.s.	14850	106467	21233	347	8196	81436	258445	7
482390: Paper and paper articles, n.e.s.	411454	58513	1132442	748305	466804	2339962	5344676	7
820559: Tools for masons/watchmakers/miners, hand tools, n.e.s.	33	57470	8813	60	42033	169256	106287	7
820570: Vices, clamps and similar	15226	9319	285	4410	12	6796	21253	7
840991: Parts for spark-ignition engines, except aircraft	8585	12517	46792	6554	26077	1821	1135692	7

Export value 1998 to 2008 in South African Rand								
HS product	Bahrain	Israel	Kuwait	Oman	Qatar	Saudi	UAE	Number of countries with export values; 1998–2008
847989: Machines and mechanical appliances, n.e.s.	19292	4741959	253112	357012	84428	1148818	11328395	7
902300: Instruments, apparatus and models, for demonstration	462977	639790	71403	10001	143490	1709613	4818318	7
902610: Equipment to measure or check liquid flow or level	1574	46315	10526	1838	1371	29329	88344	7
902620: Equipment to measure or check pressure	13826	94264	5528	213	25369	28008	45480	7
902680: Equipment to measure, check gas/liquid properties, n.e.s.	11227	36047	3140	6814	324983	36663	199996	7
902780: Equipment for physical or chemical analysis, n.e.s.	17810	356244	258	984	29562	124580	242252	7
903180: Measuring or checking equipment, n.e.s.	9645	367918	75586	22713	18761	346394	8685957	7
903289: Automatic regulating/controlling equipment, n.e.s.	11236	1063518	836	27667	2077	25923	7081250	7
090230: Tea, black (fermented or partly) in packages < 3 kg	549	266781	55335	15	---	8	16685	6
200590: Vegetable, n.e.s., mixes, prepared/preserved, not frozen/vinegar	2945	38320	---	8	16	842	56642	6
200912: Fruit juices (including grape must) and vegetable juices, unfermented and not containing added spirit, whether or not containing added sugar or other sweetening matter – orange juice	4973	214817	6675	2867	17976	---	46219	6
200971: Fruit juices (including grape must) and vegetable juices, unfermented and not containing added spirit, whether or not containing added sugar or other sweetening matter – apple juice	3716	---	6056	2867	14569	26092	34891	6
271220: Paraffin wax containing < 0.75% oil	---	5420613	162918	31067	1629820	6302396	497236	6
340399: Lubricating preparations, zero petroleum content, n.e.s.	35337	36975	---	22301	938070	4327	387513	6
480256: Uncoated paper and paperboard, of a kind used for writing, printing or other graphic purposes, and non-perforated punch-cards and punch tape paper, in rolls or rectangular (including square) sheets, of any size (excluding paper of heading 48.01)	1663937	---	14880162	5826553	4349434	35084491	30249062	6
621490: Shawls, scarves and similar, of material, n.e.s., not knit	10546	62	18	---	1641	8246	75157	6
721590: Bar/rod, iron or non-alloy steel, n.e.s.	272	193055	629171	121	---	281419	175693	6
740721: Bars, rods and profiles, copper-zinc base alloys	52591	628441	---	179130	4773	164419	1291770	6
740729: Bars, rods and profiles, copper alloy, n.e.s.	35054	137950	815	1842	---	42185	401648	6
741220: Pipe and tube fittings, of copper alloys	1483	15406	---	5737	7700	41524	23516	6
820590: Sets of hand tools	---	21054	7594	287	1258	21682	39309	6
831000: Non-illuminated base metal sign plates, letter, number	21	42284	14879	---	2361	29196	82139	6
850610: Manganese dioxide primary	1204	217	1436	1138	169	---	7505	6
850680: Primary cells and primary	274047	---	97620	111433	71604	1004281	1718267	6
850780: Electric accumulators, n.e.s.	1435	1461	1596	---	215	266887	99439	6
901580: Surveying, and similar, instruments, n.e.s.	---	5501	4167	5763	1417	1012	1458040	6
901730: Micrometers, callipers and gauges	60	5138	---	2565	78	538	3947	6

Export value 1998 to 2008 in South African Rand								
HS product	Bahrain	Israel	Kuwait	Oman	Qatar	Saudi	UAE	Number of countries with export values; 1998–2008
902580: Hydrometer, pyrometer, hygrometer, alone or combined	9426	5419	156	47970	478	---	6607	6
902690: Parts of equipment to measure or check fluid variables	51463	23739	1794	---	2589	14511	46560	6
903039: Ammeters, voltmeters, ohm meters and similar, non-recording	258	271789	---	2524	5598	67489	19785	6
903040: Gain, distortion and crosstalk meters, and similar	7	26745	88108	1909	---	1232	84211	6
903089: Electrical measurement instruments, n.e.s.	87066	32898	---	108797	106	5745	103251	6
903190: Parts and access for measuring, checking equipment, n.e.s.	36582	55359	13160	7838	---	974	17740	6
903290: Parts and accessories for automatic controls	30811	151536	2916	24672	---	10901	301740	6
090210: Tea, green (unfermented) in packages < 3 kg	1159	35701	14	---	8	---	13457	5
130219: Vegetable saps and extracts, n.e.s.	10601	33273	---	841	---	7112	26129	5
140490: Vegetable products, n.e.s.	8723	13203	---	---	176	61100	132737	5
H200941: Fruit juices (including grape must) and vegetable juices, unfermented and not containing added spirit, whether or not containing added sugar or other sweetening matter – pineapple juice	1836	---	4271	1764	10267	---	42076	5
310590: Fertilizers, mixes, n.e.s.	631	97628	19327	---	---	13231	34345	5
442110: Clothes hangers of wood	---	195039	44	---	38	20341	958	5
480255: Uncoated paper and paperboard, of a kind used for writing, printing or other graphic purposes, and non-perforated punch-cards and punch tape paper, in rolls or rectangular (including square) sheets, of any size (excluding paper of heading 48.01)	62599	686290	691063	---	---	898832	227923	5
480269: Uncoated paper and paperboard, of a kind used for writing, printing or other graphic purposes, and non-perforated punch-cards and punch tape paper, in rolls or rectangular (including square) sheets, of any size (excluding paper of heading 48.01)	---	---	94902	529159	14619	1986211	4543956	5
481820: Paper handkerchiefs, cleansing, facial tissues, towels	36	---	---	32	41	7066	6846	5
621430: Shawls, scarves, and similar, synthetic fibres, not knit	2308	814	238	---	---	20	13875	5
721633: Sections, H, i/nas, nfw hot-roll/drawn/extruded > 80 mm	---	1140351	171200	---	887528	10056777	83404859	5
721650: Sections, n.e.s., i/nas, nfw hot-roll/drawn/extruded	---	8861725	9670954	---	74607	22797154	21398434	5
722240: Angles, shapes and sections, stainless steel	---	3205	---	20	16992	205176	47727	5
722860: Bar/rod, alloy steel, n.e.s.	657	---	1293	---	13	175	11221	5
740710: Bars, rods and profiles of refined copper	14313	955716	146995	---	---	582645	8977525	5
820520: Hammers including sledge hammers	---	41700	242	---	366	28041	28324	5
820540: Screwdrivers	---	21589	---	263	81	68	1480	5
847982: Machines to mix, knead, crush, grind, and similar, n.e.s.	6376	54083	---	35620	---	1049462	54719	5
850650: Lithium primary cells	---	8486	3359	9965	---	61	26206	5

Export value 1998 to 2008 in South African Rand								
HS product	Bahrain	Israel	Kuwait	Oman	Qatar	Saudi	UAE	Number of countries with export values; 1998–2008
850710: Lead-acid electric accumulators (vehicle)	557	4150470	2617	---	---	483	115442	5
850720: Lead-acid electric accumulators, except for vehicles	261566	209863	607850	---	---	281054	1767492	5
850730: Nickel-cadmium electric accumulators	5361	---	248	734	---	23868	45902	5
901490: Parts and accessories for navigational instruments	---	16790	2009	55106	---	592	25218561	5
901590: Parts and accessories for surveying, and similar, instruments	---	2085	---	1487709	2448	12188	34793	5
902519: Thermometers, except liquid filled	5075	75	642	---	---	7819	9642	5
902590: Parts and accessories for thermometers, and similar	27	1486	741	1023	---	---	545	5
902790: Microtomes, parts of scientific analysis equipment	---	376	4459	---	27640	851	6873	5
903210: Thermostats	1959	25969	1559	---	---	3167	41628	5

Source: Quantec (2009)