CHAPTER 1
INTRODUCTION

1.1 Background and problem statement

A wide variety of cut flowers is grown and marketed by South African producers. These flowers include roses, chrysanthemums, carnations, gypsophila, asiatics, irises and indigenous cut flowers such as proteas, freesias, Guernsey lilies and gladioli. The South African cut flower industry is currently valued at R400 million and consists of approximately 420 ha of cultivated production areas and 20 000 ha of natural environment where varieties such as proteas, pincushions and ferns are harvested (Taschner, 1997b). South Africa has a large domestic demand for cut flowers and about 80% of the domestic production is sold through locally developed distribution channels such as the Multiflora auctions, wholesalers, florists, supermarkets and street vendors. The remaining 20% of cut flowers are exported, mainly to Germany and the Netherlands.

The Agricultural Research Council's Development Impact Analysis Group (ARC - DIA) is currently conducting a research programme to determine the impact of technical research and development on various agricultural industries. The flower industry was selected and researched in collaboration with the ARC – Roodeplaat's Vegetable and Ornamental Plant Institute. This institute is involved in technology development and transfer to serve the South African cut flower industry. The main question investigated in the research programme is: "What are the impact and contribution of the ARC – Roodeplaat's Vegetable and Ornamental Plant Institute?" Specific questions include the following:

- To what extent are the needs of the growers for information and technology satisfied by international and local sources (consultants, organisations, government, etc.)?
- What is the gap between the current and required information and technology?
- What is South Africa's position in the international flower industry?
- What is the impact of ARC - Roodeplaat on the South African flower industry?
- How willing are growers to form a group to fund technological development?
- What impact has new technology had during the past 5 years?

Two major studies have been conducted on the impact of technology development of the Proteaceae and Lachenalia (Wessels, Anandajayasekeram, Littlejohn, Martella, Marasas and Coetzee, 1997) as part of the ARC's impact assessment of the flower industry. This study is completed as a result of the request by the ARC-DIA as a third study on the economic aspects of the South African cut flower industry.

1.2 Objectives of this study

It was agreed that this study would focus on the following objectives:

- To contextualise South Africa's position in the international environment
- To assess growers' perceptions and marketing activities
- To identify producers' problems and discuss means of overcoming these problems
- To establish the extent to which South Africa and Australia are able to compete in the international flower industry
- To indicate the extent to which South Africa and Australia are able to compete with each other.

This study was extended to the Australian situation because of the substantial progress that the Australian flower industry has made, the increasing competition South African flowers could expect from Australia and also because the opportunity arose to study the Australian situation owing to a study exchange programme between the University of Pretoria in South Africa and the University of Queensland in Australia.

1.3 Methodology

The first methodology used in the analysis is the "Determinants of Competitive Advantage" as proposed by Porter (1990). In the application of this descriptive methodology, a general overview is given of the industry and the forces that influence a competitive advantage. The main aim of this approach is to lay a broad foundation for a further more detailed study.

Since this is only a descriptive analysis, the competitive position of the industries can be compared for the individual determinants. However, comparing the competitiveness of the industries by taking into account all the determinants would require a highly complex multi-criteria analysis which assigns weights to each industry's individual determinants. For the purpose of this study, it will be assumed that all the determinants have equal weight. This can be considered as a weakness and will decrease the validity of the results of this analysis, but this methodology can still provide some important insights into the competitiveness of these industries.

Owing to the weaknesses of the first-mentioned method, a methodology dependent on trade data was chosen to give further insights into the competitiveness of the industries. The Revealed Comparative Advantage model developed by Balassa (1989) determines the comparative advantage of industries when taking into consideration the relative importance of the industries in world trade and the relative importance of the industries as an export product of the respective countries. However, as this methodology only takes trade data into account and does not include domestic demand and supply, it cannot provide a balanced view of the competitiveness of the industries.

This led to the choice of a final methodology to give greater insight into the competitiveness of the industry from the perspective of commodity systems. The Policy Analysis Matrix (PAM) developed by Monke and Pearson (1989) analyses representative industry budgets for some of the main commodities in order to calculate the competitive and comparative advantage of the specific commodity systems.

To conclude, by employing these methodologies the study will attempt to establish and compare South Africa and Australia's capabilities for competing in the international flower industry. A general descriptive analysis will first be given as the basis for establishing these

capabilities. This will be followed by an analysis of the trade data available to establish the industries' ability to export and compete internationally. Finally an analysis at micro-level of flower systems will provide insight into the competitiveness of typical flower-producing and exporting businesses located in South Africa and Australia. Each analysis will provide a different viewpoint on the issue of competitiveness, and contribute to a greater understanding of the competitiveness of the South African and Australian flower industries – both industries in the southern hemisphere.

1.4 Scope of the study

The world floricultural industry consists of three subindustries, namely the flower industry, the foliage industry and the plant industry (IFTS, 1997). This study is restricted to the ambit of the flower industry.

The scope of this study includes two subindustries of the flower industry. The first is the cultivation of the traditional temperate flowers (flowers exotic to South Africa and Australia) that dominate commercial production and consumption throughout the world. Examples of the most popular traditional flowers produced in South Africa and Australia are roses, chrysanthemums, carnations, orchids, lilies, statice, alstroemeria, lisianthus, calla lilies, tulips, freesias and gypsophila (James, 1996). In the remainder of the study, these flowers will be referred to as traditional flowers.

The second subindustry consists of flowers derived from Australian and South African native plants (harvested in the wild and also artificially propagated). These flowers will be referred to as wildflowers in the remainder of the study. The study excludes Australian native orchids, sea grass and seaweed.

1.5 Framework of analysis and outline of the study

An analytical framework was developed within which the above objectives could be addressed. This framework is illustrated in Figure 1.1 Each of the elements in this framework will be described in detail in the subsequent chapters.

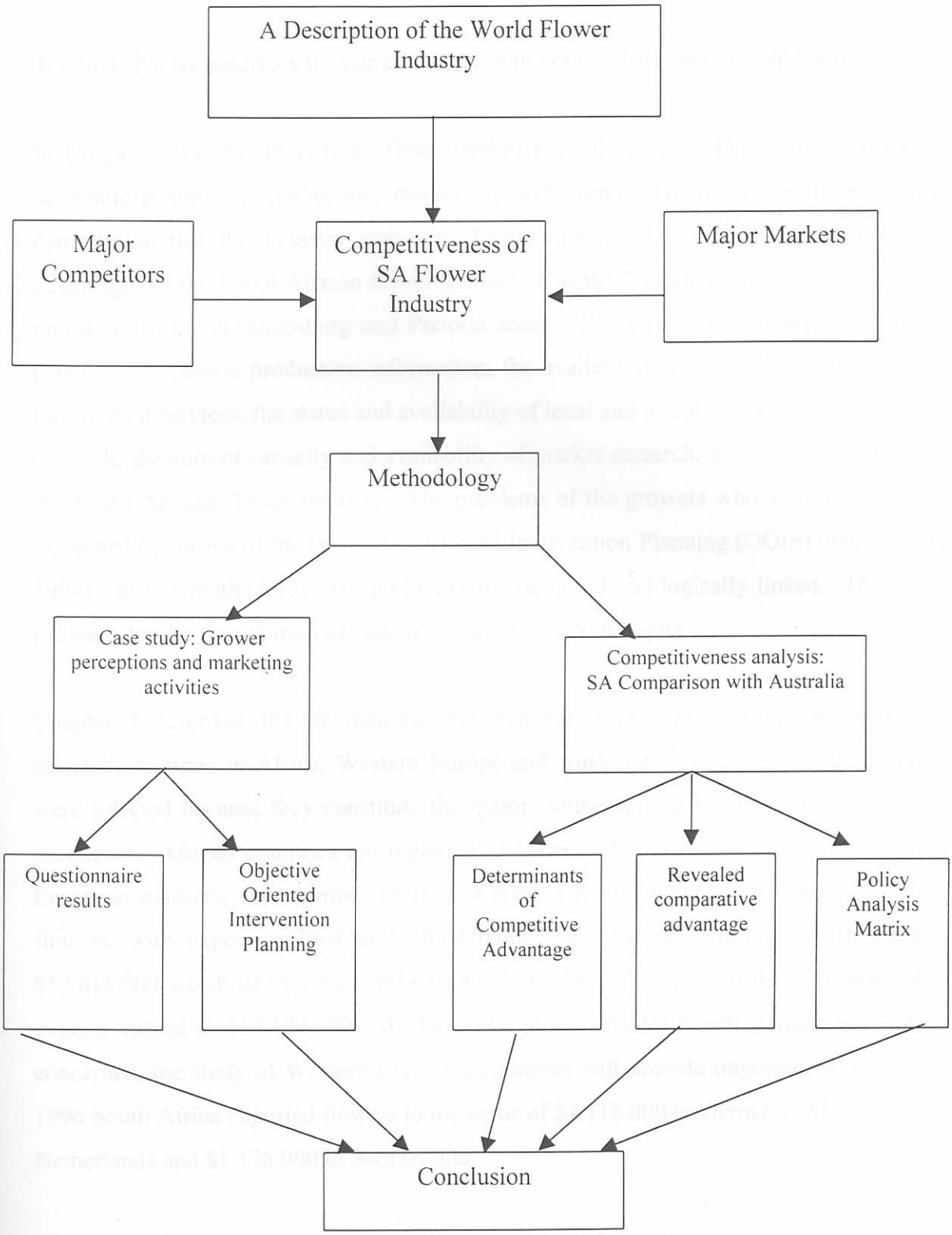

Figure 1.1: Analytical framework

The first chapter describes the current situation in South Africa and also internationally.

In Chapter 2 the South African flower industry is discussed. This chapter analyses the economic position of production, marketing, sales trends and the competitiveness and the contribution that the industry makes to development, and also assesses the comparative advantages of the South African flower industry. Chapter 2 reports a case study of cut flower producers in the Johannesburg and Pretoria areas. This case study covered the following: general and specific production information, the availability and actual use of research and information services, the status and availability of local and international technical production research, the current capacity and availability of market research, and the competitiveness of the South African flower industry. The problems of the growers who were interviewed are examined by means of the Objective Oriented Intervention Planning (OOIP) method (ABOS, 1994). In this methodology the problems are identified and logically linked. This provides the basis for the formulation of industry objectives and strategies.

Chapter 3 describes the international environment, flower production and marketing in selected countries in Africa, Western Europe and Australia. Countries on these continents were selected because they constitute the major competitors and markets for South African producers. African countries are regarded as some of South Africa's main competitors on European markets, for example in 1996 Kenya was the world's third-largest exporter of flowers, with exports valued at $[1]105 350 000. Zimbabwe followed in 7th place with $52 818 000 worth of exports, while South Africa lagged behind in the 17th position with exports valued at $10 172 000. As far as large markets for South African cut flowers is concerned, the study of Western European countries will provide important information. In 1996 South Africa exported flowers to the value of $4 118 000 to Germany, $3 182 000 to the Netherlands and $1 176 000 to Switzerland.

Then the study focuses on the competitiveness of the industry. Chapter 4 gives an overview of the theories formulated to address the issue of competitiveness and also introduces the methodology used in this study.

[1] In this study the $-sign will refer to the currency of the United States of America.

Chapter 5 gives an analysis of the South African flower industry's competitive position by applying the methodology to compare its position with that of Australia. Australia was included in this study because the rivalry between the South African and Australian flower industries has intensified in recent years. Australia has also attempted, through a research and development focus, to enhance the competitiveness of its flower industry.

The competitive interaction is visible firstly in the fact that both Australia and South Africa can produce a wide variety of increasingly popular indigenous flower varieties and compete for market share in the large world markets such as the EU, Japan and the USA. Second, Australia is probably South Africa's fastest-growing market and South Africa is Australia's second-largest supplier. Large quantities of roses, carnations and chrysanthemums valued at $730 000 in 1996 increased by almost 120% to $1 600 000 in 1997 (FECA, 1997). Thirdly, the South African and Australian flower industries have some similarities, such as geographical isolation from the major world markets, their size and the development stage of the respective industries. However, little attention has been given to understanding the nature of the competitiveness between the South African and Australian flower industries. This shortcoming gives rise to an opportunity to include in this study an analysis of the competitive position of the Australian flower industry compared to that of the South African flower industry.

The conclusions drawn are stated in Chapter 6.