

# Setting and Approach

## 1.1 Introduction

Mauritius is approaching a critical juncture in its economic development. It has successfully replicated the export-oriented growth and structural transformation of many ‘Tiger’ economies in East and South East Asia, the only country in the region to do so. It is, however, now completing the phase of export-driven growth based upon a handful of products whose competitive advantage lies in one natural resource and cheap semi-skilled labour. This is not undesirable in itself: the process of growth leads to the erosion of the edge in low wages. It is also due to factors beyond Mauritian control, such as impending changes in the trade environment that will reduce or eliminate its privileged access to certain export markets. The challenge now is to diversify and deepen the competitive base, and to create new skill and technological endowments that can allow it to continue to grow by selling high value added goods and services in world markets. It is not, however, something that can be taken for granted – a natural progression up the ladder of comparative advantage which will come about in response to rising wages – but something that has to be worked for. This is just what the Tigers did, each adopting a different strategy suited to its size, history and political economy.

This study examines the options open to the Mauritian economy with regard to *manufactured export development*. The strategic challenge of Mauritius is well recognised. Indeed, there is a large body of analysis on practically all aspects of the problem. Our study draws upon existing studies of Mauritius, field work in the country, an enterprise-level survey and puts the strategic issues in a comparative context, using data and

policies pursued in some countries in East and South East Asia.

To sketch the background, a recent UNDP/World Bank report starts thus:

*“Mauritius fared well during the 1980s. The economy grew at a rapid pace, and inflation and the fiscal and current account deficits were brought under control. Aided by a relatively well-developed human capital base, full employment and significant real increases improved the welfare of much of the population. Mauritius maintained its exchange rate at a level attractive to exporters and accumulated a comfortable volume of foreign exchange reserves. Trade taxes and restrictions were relaxed and rationalised, price controls and subsidies diminished in importance, and incentives were simplified. Exporters, especially firms in export processing zones (EPZs), took advantage of a favourable external and internal environment to propel exports into the forefront of economic growth.”*

Recently, however, clouds have begun to form above this rosy picture of strong, steady growth. Full employment, while it has clearly brought many advantages, has in recent years become an impediment to continued easy growth. Land and capital also seem to be fully employed. Natural resources are scarce as well, and the country is already using them fully. The competitiveness of Mauritian exports is diminishing with the rapid growth of real wages. And the export base remains weak, with its heavy concentration on sugar and textiles and on particular markets. It seems likely that Mauritius’ comparative advantage no longer favours labour-intensive activities as strongly as in the past. Consequently, growth

will be tied to the development of sectors with heavier requirements for education and training and based on more advanced technologies. Successful development of these activities hinges on large investments in human capital, on the right market signals to the direct productive factors to activities where their productivity is highest, and on ease of movement among sectors, activities, firms and regions. Bringing idle factors into production will contribute much less to growth than in the past. Growth will have to come instead from improvements in the quality of productive factors and from a new framework of incentives and regulations for encouraging better use of them.” (UNDP/World Bank, 1993, page i)

While Mauritius can draw many lessons from the Asian Tigers, it cannot directly replicate their policies. Though it shares a similar experience of rapid growth driven by the export of labour-intensive manufactures, the nature of structural problems in Mauritius are different from those of Asia. They are as follows:

- ❖ First, Mauritius is much smaller than any of the ‘Tigers’; even Singapore, the smallest, has a population over two and a half times larger.<sup>1</sup> The size of the economy (in particular the labour force and the manufacturing base) constrains the amount and spread of skills and inputs that it can provide, which, in turn, limits the kinds of manufacturing activities that it can efficiently foster. This becomes increasingly important in a world where flexible and efficient local supply linkages are becoming more important for competitiveness.
- ❖ Second, its location is far less favourable than that of the Tigers. Mauritius is ostensibly well-situated to serve a large potential market in sub-Saharan Africa, with considerable endowments of natural resources and labour. However, the low incomes and poor growth performance of the region, the weak human capital base, abominable infrastructure and lack of

attractiveness for FDI mean that the ‘pull’ of a dynamic market and considerable spillovers of technology, capital and skills that helped the development of the Asian economies are lacking. This does not mean that a small economy like Mauritius cannot do quite well if it carves a niche in supplying goods and services to Africa (and, indeed, this has to be a major plank of any future development strategy), but that its external circumstances are not as favourable and that it will have to ‘try harder’.

Much of the early export growth in East Asia from electronics took place at a time when the technology was exceptionally propitious for low cost assembly. Once established, the economies were able to diversify rapidly and build upon the base of capabilities that had developed. This option is no longer open to newcomers, though there are some small niches in which low cost assembly is still possible.

The leading Tigers had human resource endowments, especially of technical manpower, that were far more advanced than in Mauritius; this enabled them to take on complex technological tasks and so diversify their competitive range. The latecomers have far less by way of technical skills, but have been able to attract sufficient MNC interest that the firms themselves invest substantial amounts in training labour in-house for their own needs.

All this means that Mauritius can only borrow certain elements of Asian strategies that are suited to its size and relatively narrow range of future export activities. It has, of course, several advantages of its own, especially in relation to its neighbouring region. It has been able to tap the garment export boom as well as any other newly-industrialising country, and to enhance the quality of its output. It has used its experience of exporting, offshore financing and facilitating private sector development to develop valuable skills and capabilities that it could exploit in a number of ways. Its exceptionally open outlook and willingness to examine weaknesses and

experiment with new ideas are exceptional in the region, and are strong potential competitive strengths.

## 1.2 Objectives

The nature of export growth in Mauritius suggests that there is a strong need for an export strategy. The base of existing advantages, while valuable, is narrow and eroding rapidly; it needs to be broadened if Mauritius is to cope effectively with the emerging trading environment. While many of the economic determinants of competitiveness, such as the incentive environment, FDI attraction, physical infrastructure, finance, technology and information support are quite good by developing country standards, there are some deficiencies that remain to be remedied. This would not, however, amount to a proper export strategy: what is more important is to direct the limited strategic resources at some carefully selected export objectives.

This study is an attempt to assess the strengths and weaknesses of Mauritian manufactured exports. It starts with a 'mapping out' of its manufactured export performance relative to world markets and to the performance of selected countries in Asia that may be regarded as competitors, partners or useful role models. This is followed by an analysis of the main determinants of competitiveness in manufacturing. This is based on existing studies, comparisons with other countries, the results of an enterprise survey and, most important, interviews with a range of Mauritian firms, banks, officials and support institutions. Finally, the study presents a medium-term strategy for enhancing the country's export competitiveness.

## 1.3 A Framework for Analysing Competitiveness

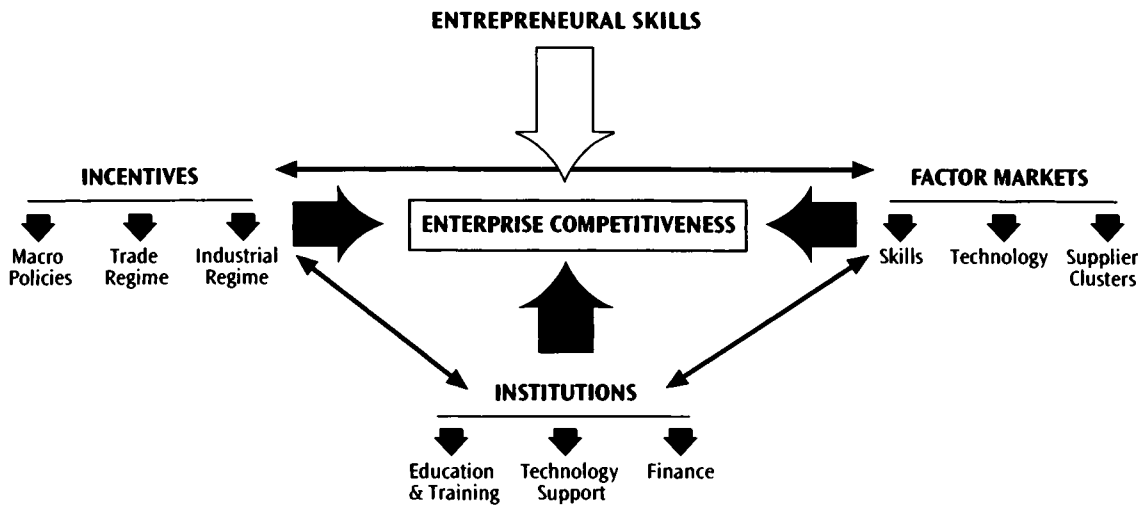
The analysis of competitiveness is a complex task. Changes in competitiveness are often analysed (mainly between OECD countries) by looking only at relative real exchange rates and

wage costs in competing countries. This is useful, but in a narrow, relatively static context, where inter-country differences in technological change and productivity, quality, design, flexibility, skills and marketing can be taken for granted (though even here may be unwise). In a developing country like Mauritius, however, these technological and related factors are among the most important determinants of long-term export success. Macro-economic variables are of course of great importance, and this study examines them; but is important to pay attention to the structural aspects of the economy.

This section sets out a simple framework for analysing the main structural determinants of competitiveness, taking the broad macroeconomic aggregates as given. The framework is based upon recent research on how competitiveness develops in the *individual manufacturing firm*,<sup>2</sup> with national competitiveness taken as the sum of the efficiency and dynamism of component firms, together with their interactions and synergy. This interaction is important, since it explains how 'clusters' of firms and industries become world class producers and sellers. The individual firm does not develop its capabilities in isolation; if it did, there would be little scope for policy support. It reacts to signals from the market, and draws upon inputs, information and skills from other firms, factor markets and institutions. The final result depends on an interaction of several incentives, factor markets and institutions.<sup>3</sup> The role for policy support depends on the need to strengthen each of these.

This can be simply represented by a *triangle of competitiveness determinants* (Figure 1.1). At the firm level there are random entrepreneurial or managerial factors that are directly not amenable to policy influence; these are left outside the triangle (though entrepreneurial education and training can be used to influence these). The factors that policy makers can affect more directly are placed in the triangle, grouped under incentives, factor markets and institutions. Each can be sub-divided into three factors. Under

Figure 1.1 Policy Triangle for Competitiveness



'incentives' are macroeconomic management, trade policy (including the transaction costs of trading), and industrial rules and regulations. Under 'factor markets' are skills, technology, and the supplier base (or 'clusters'). Under 'institutions' are education and training, technology support, and financial institutions.

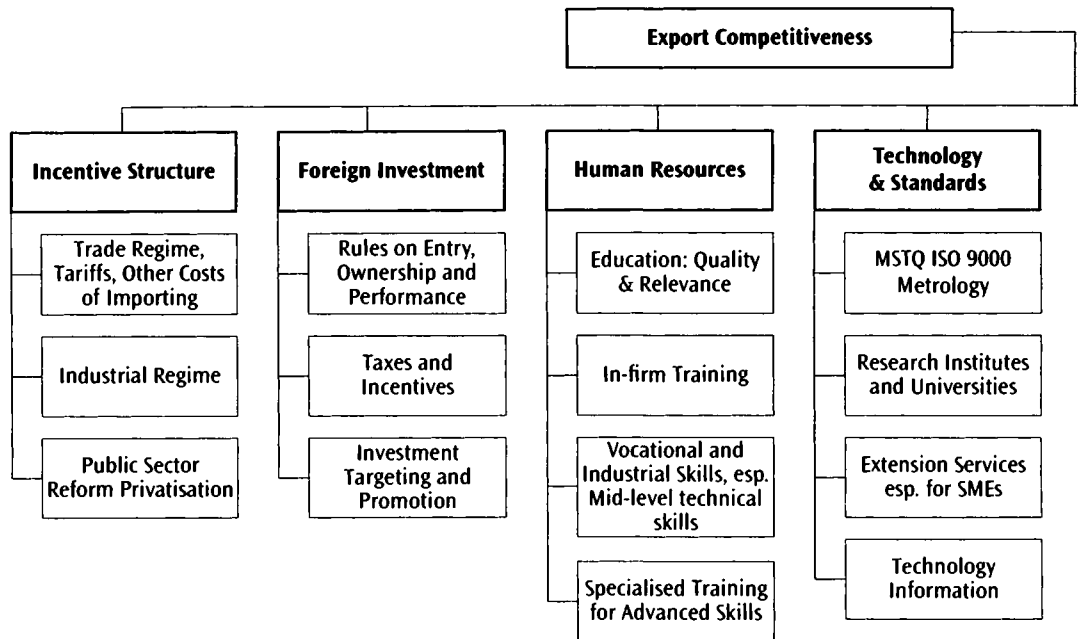
Since each of the determinants effectively constitutes a market, the need for policy support in economic terms arises when these markets do not function efficiently, i.e. when they suffer from 'market failures'. Market failures can arise from the absence of markets in developing countries, or from markets that suffer from externalities, incomplete or asymmetric information, risk and uncertainty, unpredictable learning effects, technological linkages and so on. Market failures can lead to insufficient investment by individual firms in technological or skill upgrading when the rewards are uncertain or too far in the future. They can lead to firms being unable to co-ordinate their individual actions and plans, and so to insufficient development of activities that are socially desirable but not privately profitable in the short term. This is particularly important for a country like Mauritius which has to develop

new areas of competence that require co-ordinated action by several firms, institutions and government agencies.

The policy 'triangle' can be spelt out in somewhat greater detail for the purposes of policy analysis (Figure 1.2). This anticipates the more detailed discussion below of the incentive environment for exporters, the attraction of FDI and the other supply-side determinants of competitiveness. This scheme illustrates the whole range of factors that a comprehensive policy analysis should address in seeking to build export competitiveness in Mauritius. All these factors cannot be covered fully in this study, but the following chapters seek to deal with the most important ones.

There are certain *prior steps* that may be useful in devising such a strategy. One is to conduct a *competitiveness analysis* of the main products that are exported (or exportable) from Mauritius in greater detail than this study was able to do. The analysis below of exports is a first step, but it needs to be fleshed out in much more detail at the product and market levels. More importantly, the competitive base of the industrial sector should be analysed at a fairly detailed level to understand its technology and skill needs, mar-

Figure 1.2 Elements of Export Competitiveness Policy



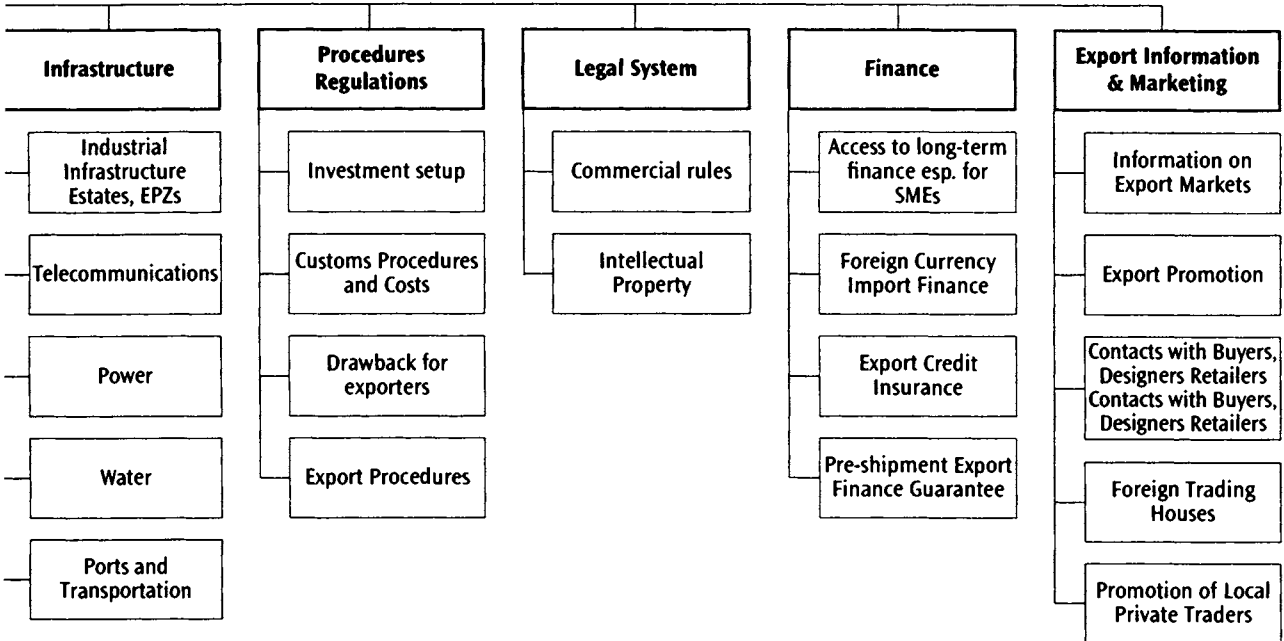
keting and managerial deficiencies, weaknesses in the value-added chain, institutional support gaps, and so on. The case studies carried out in this report are a preliminary attempt at this, but a full analysis would require much more field work and far greater resources than were available at this stage. The study also draws upon a large number of studies that have already been conducted in Mauritius, but which need to be added to and improved.

A proper competitiveness analysis would look, not only at the determinants of efficiency in individual activities, but also at *inter-industry relationships* where there are important inter-linkages between them, that is at industry 'clusters'. Considerable work suggests that the formation of clusters is a crucial part of competitiveness in many industries.<sup>4</sup> This is certainly true of engineering industries (such as transport equipment, electrical machinery, electronics and non-electrical machinery) where subcontracting and supply linkages are critical to delivery, quality

and innovation. It is also true of light consumer goods like garments where upgrading to high quality segments calls for specialisation between different firms, flexible and reliable supply links, and close interactions with designers and upstream textile suppliers. The justification for looking at clusters is to identify and exploit externalities that flow between activities in the production chain and constitute essential elements of competitiveness and upgrading of technology.

#### 1.4 Structure of Study

The study is laid out as follows. Chapter 2 of this volume sets out the comparative analysis of manufactured export performance in Mauritius and other countries. The data are obtained from the United Nations, but are available only up to 1992; the period chosen for this study starts in 1980. For Mauritius, however, there are more recent data. The data are analysed in various



ways to show the structure, technological composition, growth rates, 'revealed comparative advantage', concentration levels and strong and weak performers in Mauritian exports; comparisons are drawn to show its position in relation to neighbours and competitors. The next five chapters deal with the determinants of export performance: Chapter 3 deals with the trade and industrial regime facing exporters focusing on import liberalisation and export promotion efforts; Chapter 4 with human resources and industrial training; Chapter 5 with national technological performance, enterprise-level technological capability and institutional support; Chapter 6 with foreign direct invest-

ment patterns, fiscal incentives and the inward investment promotion strategy; Chapter 7 with the EPZ programme and the cost competitiveness of EPZ infrastructure. Finally, Chapter 8 draws upon the findings of the previous chapters to present a competitiveness strategy for Mauritius. It examines the goals of the competitiveness strategy, the prospects for different manufacturing and service activities, the institutional arrangements for an effective strategy and the main elements of the strategy. The appendices provide background information on the enterprise survey in Mauritius and a classification system for manufactured exports.