



Ministry of General Affairs  
*Secretary-General*

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## **STRATEGIES FOR SUSTAINABLE LONG TERM ECONOMIC DEVELOPMENT IN CURACAO**

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Fourth Draft report

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**T A C**

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The opinions expressed are those of the experts and are not necessarily those of the Ministry of General Affairs. The information contained in this report is highly confidential and should not be disseminated.

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**CHAPTER I.****EXECUTIVE SUMMARY**

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**CHAPTER II.****INTRODUCTION AND METHODOLOGY**

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**A. Introduction**

Curacao became a separate constituent country within the Kingdom of the Netherlands on October 10, 2010. While the Kingdom maintains control on foreign affairs and security, Curacao now has autonomy regarding its future economic development and holds its destiny into its own hands.

Curacao's macro-economic indicators indicate that the country is at a major cross-road. While it maintains valid economic activity, with a relatively high average standard of living for its population compared to the rest of the Caribbean, several factors suggest that sustainability is not guaranteed. Growth in the period 2010-2011 was more than six times lower than that of Latin American and Caribbean countries as a whole. This is occurring at a time when Dutch Government aid is no longer available. Furthermore, there is a debt of around NAf 1.7 billion. The country is vulnerable to external economic shocks, especially those emanating from the current international crisis, the resulting new economic-financial environment and climate change. Higher food and oil prices in the international market also create strains on households and other economic operators. Furthermore, growth is not equally divided throughout the economy, hence generating inequities, with youth unemployment jeopardizing the social construct and crime is on the rise. In the meantime there is a possibility of capital flight. Yet, capital availability is essential for the country's economic development and all efforts must be undertaken to keep it in the country while attracting new capital.

There is consensus among the population that maintaining the status quo is not an option. Economic policy, governance, laws, regulations and institutions must be reformed. There are too many internal and external factors which have a strong impact on Curacao, which must be proactively addressed in order to avoid the country's irreversible marginalisation in the short- to medium-term. This report highlights them.

This situation does not mean the country does not have the means to ensure its own sustainable economic development. Economic activity is present in the country. Sectors such as tourism, logistical

services, financial services, business services and transshipment, for instance are viable. Skills and capital are available. Location, climate and culture may also all contribute to a positive outcome. Hence transition towards increased sustainability and growth is possible. In this regard, it will be important to set the right ambitions according to achievable targets, based on reality and equity. Increased competitiveness, higher youth employment and adaptation to climate change are obvious goals. An incremental approach, consolidating clusters of activity around existing viable sectors is a valid option. At the same time innovation must be encouraged and investment supported. It requires the identification of key policy measures and the means to achieve them. Government spending has to be limited though. There is an Agreement with the Netherlands that in exchange of partial relief of the former Netherlands Antilles' debts, the new countries would produce sound budgets and avoid undue deficits. A Council for Financial Supervision (College financieel toezicht - Cft) was set up to approve the country's budgets. While in 2010 and 2011 budgets were in deficit (**163 million guilders in 2011**), in 2012, the CFT indicated its resolve to tighten up the budget and maintain the deficit under control. Therefore, while Curacao is in the process to determine its future economic development, it is obliged to adopt and implement sound policies that would rely on existing resources and limited public spending.

Pragmatism suggests the need to strengthen the positive factors of the country's competitiveness, while mitigating the negative ones. The country urgently needs a clear and realistic direction in this regard and a consistent plan of action. On that basis a collective effort of the government of Curaçao, public administration, economic operators and the population may be demanded to achieve the targets. While the private sector is expected to take the risks and pursue the initiatives, the government must create the environment and provide the incentives for doing business in Curacao. Coherent action and a mindset based on common interest are key success factors. This report contributes to their identification.

There are many economic development reports in the country (see **Annex 1**). Most of them skillfully address relevant issues such as tourism, SME Development, the improvement of macroeconomic indicators, competitiveness, the future of the refinery, health and education policy, competition policy, the future of the harbour, etc. Most propose valid plans and recommendations. None is effectively implemented. The fact that these reports are dispersed certainly affects their implementation. There is still a lack of a coherent vision, which would take into account all the work produced so far. Such vision should ideally shape a national consensus for which all stakeholders would feel strong ownership, as part of their nation's collective goal. Lack of implementation capacity remains the main concern in the country. Prioritization and sequencing of tasks are thus required. In order to transform words into actions, all stakeholders should know who should be in charge and accountable for implementation, when such implementation is expected and how it should be undertaken. It is therefore important to define a coherent and operational road map as well as clear implementation indicators. An effective management monitoring mechanism must be set-up. Immediate delivery of the most pressing decisions (the "low hanging fruits") is also essential. Through initial implementation, the country would create an image of stability and solidity and send the right message to both the domestic stakeholders

who are expected to contribute their efforts and the holders of capital who should invest their money in the country. This report proposes such comprehensive roadmap, which actually will constitute the most important added value of the entire activity.

## **B. Terms of reference**

The objective of this Report is to assist the Government of Curacao to develop a sustainable and stable long term economic development strategy. The overall purpose of the assignment is to investigate the possibilities and to propose concrete recommendations to expand the economy, while ensuring it has a sound business climate, is innovative, dynamic, sustainable and employment generating. Hence the Report analyzes economic indicators in order to pinpoint vulnerabilities and identify viable sectors with export potential and to carry out projections of growth based on several scenarios. It also provides recommendations on the institutional and regulatory means to alleviate the bottlenecks identified, including the general improvement of the business climate. Recommendations address an overall integrated policy which takes into account the needs of the current population, those of the local enterprises, the existing labour market and social structure in the country and its environment. Recommendations address short, medium and long-term strategies to achieve the development goal pursued. They also propose a strong research and development programme.

Finally, this Report is also expected to foster ownership, cooperation and coordination within the country and raise the capacity of its public administrators to use the indicators and analytical methods employed to realize its recommendations. This Report is also expected to guide the Government of Curaçao in the implementation of its new economic development plan and identify the relevant resources required to achieve this. Full absorption of this Report by all relevant public and private stakeholders is a pre-condition for its long term success.

## **C. Expected outputs and plan of the Report**

The expected outputs of the Report include:

### **1. Long Term Policy Paper**

The terms of reference require a comprehensive Long Term Policy Paper, which takes into account the Social Economic Initiative of Curaçao (SEI), current key sectoral studies pertaining to e.g. the oil refinery, logistics (harbor) international tourism and financial services. The study must also contain a sound analysis of the successes and failures of past economic development programs in Curacao, the

strengths and weaknesses of Curacao's economy and a comparison of successes and failures in similar countries, with a view to suggesting potential paths for success in Curacao.

International trade aspects are also addressed. Curacao's presence in the Caribbean region, as well as its historical ties with the EU and its proximity to Central and Latin America and the U.S. provide Curaçao with important opportunities to integrate into regional and global supply chains and take advantage of the current context of globalization and international trade. A well-conceived trade policy can therefore be an engine of economic growth and sustainability.

***In accordance with the Terms of Reference, this Report is structured as follows:***

### ***Chapter III: Analysis of relevant factors affecting Curacao***

Chapter III of this report proposes an analysis of the key external and internal factors affecting the country's sustainability in the long-term. While the Inception Report described at length the content and orientation of the analysis (section 2.2.A), the chapter is structured according to the following sub-divisions:

A first section defines sustainability as it affects Curacao. It proposes a definition of sustainable development; it highlights the challenges related to Climate Change and it addresses the key sustainability factors in relation to the situation of Curacao. This section emphasizes the need for change and it provides examples of adaptation strategies in the Caribbean region.

A second section provides an analysis of the current economic situation of Curacao. It summarizes the macro-economic indicators as they affect Curacao and it presents the successes and failures of past economic development programs in Curacao. It then presents a comparison of successes and failures in similar countries and it provides a detailed analysis of the determinants of economic growth in Curacao, as a small island State. On that basis, it identifies the internal and external causes of weak development in Curacao and it emphasizes the need for change.

A third section provides an assessment of relevant policies already in place to enhance Curacao's investment flows and trade and its competitiveness within its region and with the key trade partners. It addresses the full range of domestic and external policies which have an impact on the country's competitiveness and its capacity to integrate regional and international supply chains.

A fourth section is dedicated to sectoral analysis. Its purpose is to identify the principal economic sectors, products and services of Curacao that may be of particular interest to its current or potential future economic development by export generating sectors. The analysis first presents the current trade profile of Curacao; it then describes local demand in Curacao for goods and services as well as domestic investments in productive resources; it also addresses the unexploited opportunities and the reasons for this. The section then proposes the adoption of a clusters approach based on the incremental consolidation of key sectors of economic activity. It highlights those sectors and presents



their existing positive features and bottlenecks. It also reviews the existing key sectoral studies and assesses their relevance as well as the continuous validity of the recommendations they contain.

A fifth section briefly describes the regional and international context as it affects Curacao. In this context, it portrays the Current market access conditions on relevant markets for Curacao; it addresses the challenges and opportunities offered by regional economic integration processes and Curacao's possible accession to the World Trade Organisation. It then explains the challenges to take advantage of this regional and multilateral trade context.

A final section in this chapter concludes by summarizing the favourable and negative factors for Curacao's overall comparative and competitive advantage in all sectors identified as potentially critical for its future economic growth and development.

#### ***Chapter IV: Scenarios for development and recommendations***

Chapter IV of this Report addresses the options for a long-term vision of the country and the required fundamentals to achieve such vision. It suggests in this regard the way in which the existing factors contributing to the country's economic development may be strengthened, while new such factors should be created with limited budget implications. While the Inception Report described at length the content and orientation of the analysis (section 2.2.B), this chapter is structured according to the following sub-divisions:

A first section presents the proposed overall strategy for industrial development based on an incremental approach for sectoral development around clusters of goods and services. It highlights the need to adopt policies fostering entrepreneurship, investment and innovation and it provides a comparison with successful and less successful development programs in similar small-scale countries in the Caribbean region or elsewhere.

A second session proposes a ten years' impact assessment of the identified strategy and projections on economic growth and key factors for sustainability, such as environmental sustainability, social and labour sustainability, financial sustainability, balance of payments and competitiveness.

A third session proposes the adjustment and support measures required in Curacao. The objective is to strengthen the existing factors contributing to the country's economic development, create new such factors with limited government spending and reverse the negative trends affecting the country's long-term prospects.

## **2. Two draft Action Plans**

The terms of reference require that two draft action plans be produced to implement the optimal development strategy that will have been identified in the Long Term Policy Paper, after consultations and policy deliberations with the relevant stakeholders in Curacao. One Plan would address short term

measures and activities, while the other would address medium term ones. Both plans operationalise recommendations aiming at enhancing economic activity, investment and trade of Curacao within its region and with the rest of the world. They are to be structured as follows:

A first section proposes a sequencing and prioritisation of actions, by highlighting the fundamentals that must be achieved, the “low hanging fruits” and the longer term investments.

A second section describes the actions to be taken at the different levels, by the Government of Curacao, by the enterprises and by civil society.

A third section provides the action map for the establishment of a Monitoring Management System for Implementation.

A fourth section emphasises the need to build consensus on core areas and identifies an inner circle of undisputable policy issues shaping the national political identity.

A fifth section provides recommendations for additional technical assistance activities, if required, and use of available EDF and other donors’ funds.

Finally a sixth section provides indications of required budget and expenditures.

Both action Plans are supported by summary tables, containing clear implementation indicators, facilitating follow-up and enforcement, as the case may be.

#### **D. Conduct and methodology of the Study**

The Mission was conducted in six phases; Phase 1 was the Inception phase (20 January- 11 May 2012). Phase 2 was a launching Workshop and a second mission (14-24 May 2011). Phase 3 was about analysing data, the conduct of four sectoral workshops and a third mission (25 May -30 June 2012). Phase 4 was the drafting of a preliminary factual report and a validation stakeholders’ workshop (1 July – 29 October 2012). A rather long Phase 5, which is explained by a political crisis which took place in Curacao during that period, consisted in the preparation of the scenarios for long term economic development, liaison with the Interim Government and the preparation of the Action Plan. Phase 6 will consist in the conduct of the final validation workshop and the conclusions of the Activity.

The overall methodology for this study has been described in the Inception Report and in the mid-term Report, attached in **Annex 2** hereto. In summary, the descriptive parts of the Report are based on consultations with the main stakeholders and the numerous studies and other papers made available to the authors. Consultation partners were asked to inform the consultants about their main trade related functions or interests, the constraints they have experienced in their daily work in achieving their objectives, and their views on how the Government or other players might contribute to the fulfilment of their objectives. The findings of the Study are based on both a documentary and statistical research on the trade and economic issues affecting Curacao and on-site missions and interviews with

stakeholders, prepared on the basis of detailed questionnaires. Altogether, in the various phases of the mission the consultants had more than 70 meetings and met with an even larger number of government, business and other organizations.

The list of documents and statistics consulted is included in **Annex 1** hereto. The questionnaires are included in **Annex 3**. The programmes of all workshops held are attached in **Annex 4**, and the list of meetings held and persons interviewed can be found in **Annex 5**.

This study was written with the view of its dissemination among all interested stakeholders. Accordingly, it aims at being as clear as possible and at conveying information to an audience that is not specialised in trade and economic policy. Therefore, wherever possible, the language used has been deliberately kept simple. Furthermore, where relevant, some sections were taken and adapted from a study two of the authors of this study produced regarding Regional Economic Integration Processes (Caribbean, Indian and Pacific Ocean) and Recommendations aiming at enhancing trade and economic activity of OCTs within their region and with the EC<sup>1</sup>. However, we believe that there has not been a compromise to the analytical integrity of the report as a result of this simplification.

The recommendations and the suggested actions included in the Action Matrix are based on the Consultants' analysis; hence they do not necessarily coincide with the suggestions made by the bodies consulted. In some cases the consultants have identified actions which have not been mentioned by the Curacao partners, and in certain cases they have not included some suggestions in their report due to conceptual reasons or the suggested action did not fit in the time horizon of the period covered by the paper. The recommendations and the proposed interventions included in the Action Plan clearly suggest that the pursuance of reforms and the successful integration of the country into the world economy needs consistent policies, a stable legal framework, a business friendly environment, a much closer involvement of the business community in the formulation of economic policy and significant capacity building at all levels of Government and business.

The full draft report was handed over by the Team to the Government of Curacao on .... 2013. On ..., the Consultants received a number of comments from the Steering Committee. Other stakeholders have also commented on the draft. The present text reflects most of the comments which have been forwarded to the Consultants.

## E. Note on Political Challenges

Already in the early stage of the Mission the Team has been confronted by different and often contradictory views about the business environment in Curacao. While the view was unanimous that Curacao, if it intensifies its reforms and deeper integration into the world economy, will remain a

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1 See Luff, D., P. Baker & Balestieri, E. (2010) The Analysis of the The Analysis of the Regional Economic Integration Processes (Caribbean, Indian and Pacific Ocean) and Recommendations aiming at enhancing trade and economic activity of OCTs within their region and with the EC, DFC, Final Report.

prosperous country with promising future, some experts, and businessmen qualified the speed of changes too slow and formulated a negative opinion about the quality of Curacao' legal and political framework, judicial system and institutions. They stressed that laws in Curacao are not transparent, give too much discretionary power to the executive power, law enforcement is weak, vision is lacking, the judiciary system is not reliable, public administration is badly organized, and political opportunism is pervasive practically in all aspects of life.

The Consultants are aware of the complexity of the problems Curacao is facing and note that the country, since the beginning of its autonomy, has undergone enormous pressures from its internal divisions, the Dutch Government, a changed financial environment and international competitive forces. In the context of a long-term economic development strategy it is very important to keep in mind that the remodelling of Curacao's law and institutions, will lead to deep changes. Curacao, like a number of other Caribbean countries, has realized that its old, often market alien institutions are crumbling under the pressure of globalization and need substantial adjustments.

The Consultants are convinced that the viability of reforms needs not only new regulations and institutions but also a change in attitude which requires time and calls for complex, comprehensive and rigorous approaches in the implementation of the reform programme.

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## CHAPTER III.

### ANALYSIS OF RELEVANT FACTORS AFFECTING CURACAO

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#### A. Defining sustainability as it affects Curacao

##### 1. Definition of sustainable development

The United Nations Commission on the Environment and Development (UNCED) in Rio de Janeiro in 1992 coined the term “Sustainable Development” (SD) that continues to be pursued by most developing nations. The focus of this development paradigm is on improving the quality of life of present populations without compromising the ability of future generations to satisfy their own needs. Within this context therefore, the emphasis has shifted away from the pursuance of optimizing economic growth<sup>2</sup>, i.e., physical expansion in output, and is instead placed on what has become known as gross domestic product plus (GDP+). It emphasises the generation of growth while simultaneously advancing environmental sustainability and social well-being.

Unfortunately, the development imperatives for small, open economies like Curacao are still largely based on economic indicators, such as the expansion in gross domestic product (GDP), foreign currency reserves held, and improvements in the purchasing power parity (PPP). While these are necessary ingredients for advancing Curacao’s well-being, they are insufficient for the sustained economic growth and development that will assist in promoting inter- and intra-generational equity. Furthermore, these economic indicators often come at high, significant and irreversible social, environmental and economic costs, such as extreme poverty levels that are still reportedly above 15% in Curacao<sup>3</sup> (UNDP, 2011)<sup>4</sup> and growing socio-economic disparities. There is clearly, therefore, the need for a new economic framework for Curacao, an island with substantial marine resources, but limited technical resident human capital and high energy costs estimated at 0.42 US\$/kwh.

It is within the above context that the need to develop sustainable development indicators that would help monitor progress is also becoming critical. The World Commission on Environment and Development (WCD) called for the development of new ways to measure and assess progress. This

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2 While economic growth is seen as a necessary condition for achieving SD, it is insufficient to accomplish SD goals

3 According to the Central Bureau of Statistics (CBS) of Curacao (2012) and using a poverty line of ANG1,045 monthly income per person it was found that nearly 39% of Curacao’s residents were living in poverty in 2008. This line was since adjusted to ANG1,190 on 1<sup>st</sup> September 2012 but it is unclear the estimated number of persons living below the poverty line at this time.

4 United Nations Development Programme (2011) First Millennium Development Goals Report – Curacao and Saint Maarten,

need was echoed in Agenda 21<sup>5</sup> which calls on countries and the international community to develop indicators of sustainable development. The Johannesburg Plan of Implementation<sup>6</sup> and the United Nations Commission on Sustainable Development (UNCSD)<sup>7</sup> encouraged further work on indicators for sustainable development by countries, in line with their specific conditions and priorities.

Accordingly, Curacao Tourist Board commissioned a study on Sustainable Tourism Indicators in 2010. This study, concentrating largely on four (4) categories: (i) natural and cultural heritage dimension, (ii) economic dimension, (iii) social and ethical dimension and (iv) specific dimensions, indicates that the Island had a generic overall sustainability index of 7.2, specific index of 6.2 and a tourism index of 1.7 out of 10. The major reason for the scores are due largely to the following reasons:

- It is not compulsory to undertake either an environmental impact assessment before development or to have an environmental management plan. Some projects do undergo an impact assessment but these are few to be considered significant.
- Need to transform the economy to more renewable energy sources for greater energy independence, security and improve competitiveness.
- Insufficient quality data to assess the Islands sustainability indicators.

In the redefining the entire concept of sustainable economic development, key objectives must be kept in mind:

- Information missing needs to be collected urgently in order to complete an actual sustainability assessment.
- Current infrastructures and future development should be highly improved in terms of sustainability.
- Curaçao population and politicians' awareness should be raised on the matter.
- Existing policies, regulations, legislation and enforcement should be improved and future ones should take into account sustainability criteria and should be developed towards the general goal of reaching high standards of sustainability in Curaçao.
- A high priority must be given to assessing vulnerabilities to Climate Change and to developing adaptation strategy.

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5 Chapter 40 "Information for Decision-Making". (Source: Rio 2012 Issues Brief # 6 (2012) United Nations Commission for Sustainable Development (UNCSD) Secretariat.

6 Chapter X. (Source: Ibid)

7 CSD-11, CSD-13

## 2. Challenges related to Climate Change

Curacao has considerable concerns about the threats posed by a changing climate to its development prospects and both mitigation and adaptation options will require a significant and sustained investment of resources that the Island would be unable to provide on its own. Curacao, as a Small Island and Low-Lying Coastal Developing State (SIDS) exhibits some common characteristics, inclusive of relatively small physical size, proneness to climate extremes, extreme openness of its economy and dependence on exports, and low adaptive capacity that exacerbates its vulnerabilities<sup>8</sup> and risks<sup>9</sup> while simultaneously reducing its resilience to growing global events, such as climate variability and change, and globalization.<sup>10</sup> As such, Curacao's future development strategy has to be predicated on proactive, sensible, and practical measures that seek to respond to these global challenges while simultaneously exploiting the opportunities they present. Adaptation to climate variability is not new, but Climate Change (CC) is presenting heightened challenges, exposing certain vulnerabilities<sup>11</sup> nationally and locally, and increasing the combinations of risks with potentially grave consequences.

For example, though Curacao contributes less than 0.001% of global greenhouse gas (GHG) emissions, past emissions of carbon dioxide (CO<sub>2</sub>) and other GHGs globally have placed the world on a course for future Climate Change (IPCC, 2007). While deciding what level of Climate Change is dangerous and what might be safe is not a purely scientific question as it involves normative and political judgments about acceptable risks, the United Nations (UN) Human Development Report (2008) and the State of the World Report (2009) of The Worldwatch Institute have identified 2°C as the threshold above which irreversible and dangerous Climate Change will become unavoidable. At current rates, the carbon budget is set for expiry during the 2030's, setting in motion processes that

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8 According to Schneider, S.H., S. Semenov, A. Patwardhan, I. Burton, C.H.D. Magadza, M. Oppenheimer, A.B. Pittock, A. Rahman, J.B. Smith, A. Suarez and F. Yamin, (2007): Assessing key vulnerabilities and the risk from climate change. *Climate Change 2007: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*, Vulnerability to climate change in this document is viewed as the degree to which the region is susceptible to, and unable to cope with, potential adverse impacts.

9 Chapter X (Source: Ibid).

10 Mimura, N., L. Nurse, R.F. McLean, J. Agard, L. Briguglio, P. Lefale, R. Payet and G. Sem (2007): Small islands. *Climate Change 2007: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*, M.L. Parry, O.F. Canziani, J.P. Palutikof, P.J. van der Linden and C.E. Hanson, Eds., Cambridge University Press, Cambridge, UK, pp 687-716.

11 Vulnerability to climate change in this Strategy is viewed as the degree to which geophysical, biological and socio-economic systems is susceptible to, and unable to cope with, potential adverse impacts (Schneider, S.H. et al, 2007:781)

can lead to temperature increases of 5<sup>0</sup>C or above by the end of this century. This would be roughly similar to temperature changes since the last ice age 10,000 years ago.<sup>12</sup>

Concomitant with Climate Change will be global temperature change, with analysis of observational data for Curacao already indicating a level above the global mean temperature increase of approximately 0.6°C during the 20th century. At the same time, mean sea level rose by about 2 mm/yr and rainfall variability that appears to be closely related to the El Nino Southern Oscillation (ENSO), has increased. All of these events are likely to have profound impacts on geophysical, biological and socio-economic systems of Curacao, through affecting economic activities in the tourism sector in particular, productive capacities, freshwater systems, infrastructure, coral reefs, fisheries and other marine based resources, livelihood activities, health and environmental security of the populations, energy consumption, trading abilities, and simultaneously depleting national budgets. Moreover, they are likely to compromise the ecological services provided by some of these fragile ecosystems, such as corals, vital for sustaining lives and livelihoods on this island.

Importantly, some circumstances that deepen the Island's economic, social and environmental vulnerabilities also impede its ability to acquire and use appropriate technologies to stimulate its SD and to support adaptation to Climate Change. Technology, generally, is developed, promoted, and marketed by the private sector. In many instances the technologies developed in the more developed countries have to be adapted for effective use in SIDS. However, the thinness of the markets in the region and Curacao, and diseconomies of scale make such endeavours very risky and unattractive to investors. In addition, the business leaders in the region tend to be reluctant to embrace new technologies unless they have been shown to be successful elsewhere.

It is within the above context that leaders of SIDS endorsed the Liliendaal Declaration proposed by the Caribbean Community (CARICOM) countries at the Conference of Parties in 2009 in Copenhagen, Denmark. These declarations include:

- Long-term stabilization of atmospheric greenhouse gas (GHG) concentrations at levels which will ensure that global average surface temperature increases will be limited to below 1.50C of pre-industrial levels; that global GHG emissions should peak by 2015; and ultimately reducing GHG emissions by more than 95% of 1990 carbon dioxide (CO<sub>2</sub>) levels by 2050.
- Adaptation and capacity-building must be prioritised and a formal and well-financed framework established within and outside the United Nations Framework Convention on Climate Change (UNFCCC) to address immediate and urgent, as well as long-term, adaptation needs of vulnerable SIDS and least developed countries (LDCs).
- The need for financial support to SIDS to enhance their capacities to respond to the challenges brought on by climate change and to access the technologies that will be required to undertake needed mitigation actions and to adapt to the adverse impacts of Climate Change.

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<sup>12</sup> United Nations (2008): *Human Development Report 2007/2008 – Fighting Climate Change: Human Solidarity in a Divided World*, UN Press, New York.



It must be reiterated that Curacao's efforts to promote SD and achieve the Millennium Development Goals (MDGs) are under threat from those posed by Climate Change and sea level rise. Of particular note is the increasing intensity of extreme weather events, which can result in severe damage to the Island's socio-economic resource base.

### **3. Key factors for sustainability and the situation of Curacao**

#### ***a. Environmental sustainability***

The persistence of poverty and environmental degradation (associated mainly with, but not exclusively, poor development planning and inadequate coastal zone management) can be traced to a series of market and institutional failures that make the prevailing economic model pursued far less effective than it otherwise would be in advancing sustainable development goals. These market and institutional failures are well known to economists, but little progress has been made to address them. For example, there are insufficient mechanisms to ensure that polluters pay the full cost for their polluting actions. There are "missing markets" – meaning that markets do not systematically account for the inherent value of services provided by nature, like water filtration or coastal protection. A "market economy" alone, therefore, cannot provide public goods, like efficient electricity grids, sanitation or public transportation.

The ecosystems-based services provided by Curacao's natural resources, such as its coral reefs, mangroves and sea grasses, must be harnessed for the future development of the country and to sustain the very tourism on which the country so largely depends. As such, it will be contingent that Curacao recognizes the need to record natural assets as part of its GDP to measure how quickly they are being lost. The move to better metrics is the realization that gross national product (GNP) does not measure properly what makes us well-off and satisfied.

Curacao, like many other SIDS is challenged in dealing with its waste. The major problems in waste management in Curacao, vital for environmental sustainability are: (a) pollution of marine pollution from land based sources such as domestic sewage, industrial effluents and agricultural runoff: they carry risks for human health, and can degrade habitats such as coral reefs, and tourist attractions such as beaches; Curacao will have to be careful that it guards against receiving bad publicity related waste management which can have major adverse impacts on its tourism industry and by extension, economic development; (b) the management of toxic substances such as pesticides, waste oil, heavy metals: Curacao has limited physical capacity to isolate and dispose of such substances in an environmentally sustainable manner; (c) sewage treatment facilities: in Curacao such facilities are inadequate resulting in poorly-treated effluent being discharged into the environment; and (d) ineffective regulations: Curacao has devoted much time and resources on developing regulations;

however, regulations have not always been very effective because of inadequate institutional and human resource capacities to enforce them.

Critical for dealing with this waste management issue is the transformation in focus from pollution prevention to materials management, to find flexible, yet protective ways to conserve resources through:

- Pollution prevention, recycling, and reuse of materials
- Reduction of the use of toxic chemicals; and
- Conservation of energy and materials.

Responsibility has to be shared for improving environmental sustainability through partnerships and collaborations that encourage businesses, consumers, and government to work together to make changes across the whole supply chain – from easier product reuse and to recyclability. Most of the partnerships are voluntary while others are alternatives to regulatory control. Benefits include recognition for activities that result in resource conservation.

#### ***b. Social / Labour sustainability***

The harnessing of social energy and potential to deliver better developmental results for Curacao is an imperative. Based on discussions with knowledgeable personnel, it was pointed out that Curacao, with a population of approximately 150,000 inhabitants (Central Bureau of Statistics, 2011), suffers from two major population related issues: (i) significant brain drain of its qualified personnel, and (ii) relatively high levels of youth unemployment, estimated in the vicinity of 25% of its youth working population according to the Labour Force Statistics (Central Bureau of Statistics, 2011). The first factor is said to be occasioned by declining job opportunities on the island after persons would have qualified themselves and a growing level of uncertainty about the economic development prospects of the economy. At the same time, the relatively high level of youth unemployment has been attributed largely to the mismatch between labour demand and supply and a need to make the education system more responsive to the needs of the Island.

Given Curacao's limited human capital, its future development will depend largely on harnessing all human capital available to it. While the government continues to spend a relatively high percentage of its GDP<sup>13</sup> on the education system compared to other countries in the region, there continues to be clear areas for improvements. Further, the relative salaries of teachers in Curacao are comparatively higher than those in comparative economies in the region (this point is elaborated later in this report). At the same time, Curacao sits in an enviable position in the region, with each graduate from secondary school being proficient in at least three official languages, i.e., English, Dutch and Spanish.

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<sup>13</sup> It was estimated that in 2010 the Government spent approximately 5% of GDP on this sector (Education Ministry Officials, 2012)

The main issue however, is that the drop-out rate from secondary school remains high. For example, youths aged 15-24 years old the drop-out rate was estimated at 43.6% in 2001 and 36.5% in 2005 (UNDP, 2011). This means that the prospects for these persons to be absorbed within the formal job market and to earn an acceptable level of income remain challenging.

**c. Financial / Budget sustainability**

The financial position of Curacao continues to be tenuous. The Island continues to be affected by significant budget deficit, occasioned largely by increasing public spending relative to revenue intake. While deficits are not in themselves harmful, if they are not used to drive economic growth, they can become a drag on an economy, leading to a debt crisis and all its contingent problems. This budgetary situation has meant that the government does not have the fiscal space to make the kinds of investments necessary to enhance the investment infrastructure of the country. Moreover, it leads to growing uncertainty and can lead to either capital flight or a wait and see attitude by investors, none of which are healthy for the economy.

**d. Balance of payments**

A balance of critical importance for island economies, this measure speaks to the health of the external sector via two general components: the current and capital account. While the current account captures the external activity (imports and exports) of export sectors, whether for goods or services, alongside income (e.g. repatriated or interest income) and transfers (e.g. aid and remittances), the capital account keeps track of the ebb and flow of capital between the home country and external investors (and creditors). Balance of payments (BoP) difficulties can source from many factors; however, attention is often given to the current account as numerous crises have been preceded by large current account deficits, e.g. Chile (1981), Mexico (1994), and Thailand (1997). In situations where an economy faces a large current account deficit, it must be sustained by the sale of foreign assets, privately owned or official reserves, or via finance from abroad. If foreigners, however, suddenly become unwilling to provide further financing and domestic liquidity of foreign assets is limited, the current account would need to necessarily adjust through a collapse in domestic demand. In other words, the resulting large BoP deficit would require a correction in the current account.

For small and open island economies like Curacao, it is expected that more is imported than exported due to natural barriers common to islands. In turn, to observe current account deficits near 10% of GDP is normal (or BoP deficits). In circumstances where the current account shortfall far exceeds this mark caution is warranted, especially when foreign exchange reserves fall below the generally accepted threshold of 3 months of import cover but also struggle to remain above this mark. This threshold is generally applied to island and non-island economies, hence is not sensitive to the

difference in constraints. Although debatable, there is a case to be made that this threshold should be raised for islands. Ideally, a healthy BoP account should be: generally driven by the relatively less volatile current account; be supported by sufficiently abundant foreign exchange reserves; and driven by relatively more stable and long-term financial assets within the capital account. Lastly, an often overlooked point of emphasis, is that if a sizeable share of imports is related to productive investments and not consumption then, presuming there is adequate reserves, an island can afford to expand the current account deficit, as the long-run growth benefits are likely to compensate for the expansion.

#### **e. Competitiveness**

For a vibrant economy, it is essential that the enabling environment be created and maintained. Economic growth will only result when the necessary public and private investments are made, supported by a qualified labour force and the appropriate business climate; when existing resources become more productive; or a combination of these two events. Small, open economies like Curacao have some inherent disadvantages, i.e., limited capacities and scale economies, relatively high cost of energy, high transportation costs, and in Curacao's case, limited natural resources, inclusive of freshwater and the cost of producing this resource. In short, the cost of doing business tends to be high due in part to the cost of capital (often due in part to the transaction costs associated with monitoring small firms) and administrative hurdles and discretionary practices.

But Curacao also has some relative advantages, inclusive of her geographical location in the Caribbean, the multi-lingual nature of its work force and the fact that it is currently largely outside the hurricane belt in the Caribbean, though it is anticipated that with the advent of climate change the possibilities for more intense storms and hurricanes originating further south in the Atlantic means that Curacao's vulnerabilities are increased. These features would seem to indicate that there are possibilities for the country to exploit.

#### **f. Agriculture and Food security**

According to the Food and Agricultural Organization (FAO) of the United Nations (2007) a nation is said to be food secure when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life. Curacao's agricultural sector, comprised of some arable agriculture, livestock and fisheries, remains nascent and labour intensive, despite it is estimated that some 5,000 hectare of land are available for arable agriculture. The island is said to produce a very high quality of products and is relatively disease free. However, in the absence of phyto-sanitary legislation and laboratory facilities to test for pesticide and other residual trace elements it is difficult to test this assertion.

However, major challenges remain in the arable agricultural sector due in large part to the relatively abundant and cheap supplies of imported foods brought into the island that “crowd out” local production, the low net benefits derived from being engaged in agriculture and the fact that Curacao is a freshwater scarce island. Shifting rainy seasons around which farmers plan their planting routine and longer dry periods said to be associated with climate change, high wind velocity and thus high evapotranspiration rates leading to high night temperature that affect germination continue to negatively impact the sector. Furthermore, poor soil quality, inappropriate land use planning and the fact that some major food crops (rice, sugar, grains and potatoes) cannot be cultivated in Curacao are all mitigating factors.

Further, the livestock and fisheries sub-sectors have been affected mainly by external factors, i.e., rising grain prices that caused feedstock to increase and thus the input price for livestock; the rise of fuel price in 2008 to US\$147 per barrel that increased the cost of fishing; and increased overfishing, all of which have increased the cost and effort of the fish catch. There is also an inadequate legislative framework to protect the marine resources and limited research has been conducted to ascertain the effects warming temperatures northward may be having on migratory patterns of the fish stock.

With more projected extreme weather events, food prices are likely to continue to fluctuate with a general trend to move upwards. This has implications for Curacao’s food import bill and ultimately food security. It may also provide an opportunity for Curacao to enhance its own food production, but this would require, inter alia, further detailed integrated land use planning and development of the necessary investment climate for persons willing to move into this area of economic activity. Furthermore, if the emphasis remains on tourism as one of the growth poles of the economy, the potential linkages between this sector and tourism ought to be encouraged, with the adage “a dollar saved is a dollar earned” promoted.

#### ***g. Crime***

Data indicates that crime remains relatively low. This is an asset in the Caribbean and the neighbouring Latin-American markets where several nations experience high insecurity. However, it is the perception that crime is increasing. This is possibly due to an expanding informal economy, a growing unemployment rate and difficulties in the Island being able to police its borders. This remains a threat to the country’s aspirations to expand its tourism product, given the fickle nature of this market and the fact that Caribbean tourism destinations remain high cost locations.

## **B. Analysis of the current economic situation of Curacao**

This section focuses on the macroeconomic aspect of sustainable development: it aims at identifying and analysing the critical factors that can lead to higher potential economic growth. For an economy to augment potential growth to focus on merely macroeconomic variables is tantamount to shooting oneself in the foot, as the same variables that drive productivity and by extension long-run growth depend on an economy's factor endowments, including land and labour. Hence, the importance in considering environmental and labour sustainability issues in the economic policy creation process.

These elements of sustainability and others are kept in mind throughout the analysis. For example, a policy emphasis on human capital development, which is addressed later in our analysis, is clearly one that would enhance labour sustainability by potentially generating jobs by attracting foreign firms and allaying the extent of brain drain of qualified personnel.

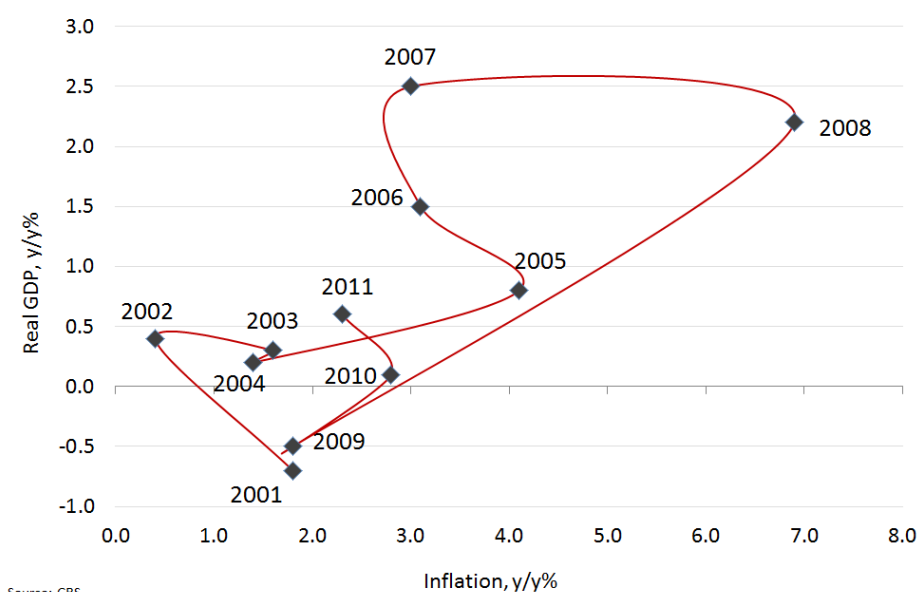
However, the formal inclusion of these links between the various facets of sustainable development is not relevant in the diagnostic phase, which is merely taking stock of the performances and hindrances as they are today in Curaçao. The durability of economic policy decisions in light of sustainability factors will be addressed more explicitly in the projections / policy option and scenario exercise.

### **1. Summary of macro-economic indicators**

An initial general appreciation of Curacao's macroeconomic performance from CBS statistics over the past 10 years can be illustrated with a chart crossing the performance in terms of economic growth with the results in terms of consumer prices. The chart below highlights three key features:

- On average, Curacao's GDP growth has been very mediocre (0.7% average over 2001-2011), with average inflation not too high (2.7% over the same period);
- Curacao's economic path clearly shows two different types of periods: higher growth associated with higher inflation during "euphoric" period (2005-2008), and periods of very low growth with very low inflation;
- Compared with many other countries, this macro path suggests that (1) increasing domestic demand translates rapidly into either stronger price pressures and/or growing external account deficits and (2) that overall performances are highly dependent on international events, both on growth (e.g. sharp reversal in 2008-2009 when the global financial crisis erupted, situation in Venezuela, etc) and inflation (spikes in food and energy prices in 2007-08).

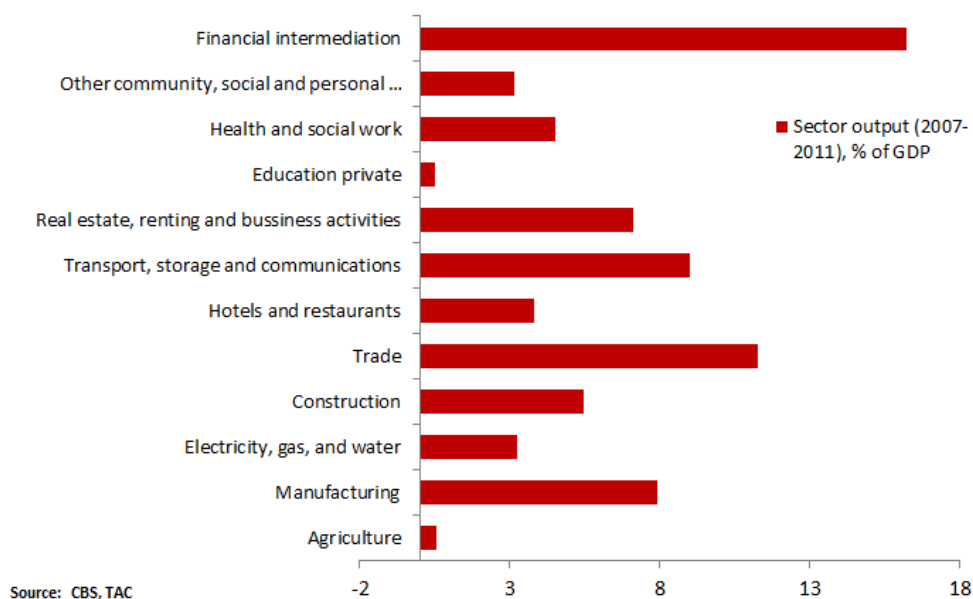
Figure 1 Curaçao real GDP growth and inflation, 2001-2011



Looking at the island's recent activity, the analysis shows a mix between purely cyclical factors (mostly related to the international environment) and more medium-term effects of structural change and issues.

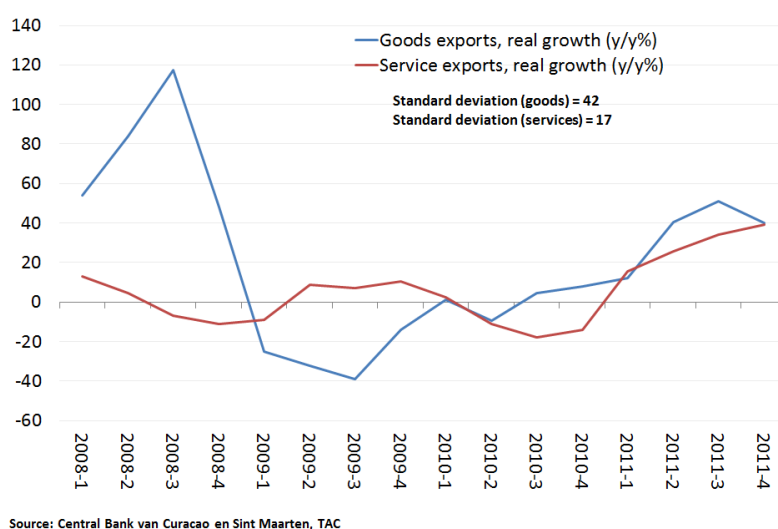
CBS data highlights that the largest contributor to the overall economy over the past few years has on average been the 'financial intermediation' sector, representing 16% of total output. Thereafter, follows the 'wholesale & retail trade' and 'transport, storage and communications' sector. Together, they comprise more than 50% of total production and a considerable share of exports for both merchandise goods and services. Hit by an adverse exogenous shock and a 0.5% contraction in real GDP growth in 2009, the economy as a whole has struggled to recover, registering a tepid 0.6% two years later according to CBS growth estimates. Led by private consumption, the rebound in domestic demand is driving the recovery while gross fixed investment has yet to recover, expanding at a below 2% pace, according to IMF data. Consequently, inflation has eased noticeably from the 6.9% figure recorded in 2008 whereas the unemployment rate is on a renewed rise, posting 9.8% in 2011.

Figure 2 Financial and Trade sectors largest contributors to GDP



The uptick in domestic demand in 2010, however, came at the expense of a robust advance in real imports (and rising oil prices) amid declining real exports (IMF: -5.6% for 2010). As a result, the trade deficit widened, exceeding the pre-crisis level, and pushing the current account deficit deeper into the red, which based on IMF statistics stood at about 30% of GDP in 2010. On the upside, the fact that the island's export base is largely comprised of service goods, generally less volatile relative to manufactures (see graph below), pre-empted potentially a larger drop in total goods & services exports. Although the current account deficit is unsustainable and foreign exchange reserves are falling, for the moment reserves remain above 3 months of import cover. Moreover, net FDI, an important source of stable foreign reserves, has continued to decrease from 5.2% of GDP in 2008 to an estimated 2% in 2011, according to IMF estimates.

Figure 3 Growth in services exports relatively stable



With trend growth steadily declining over the past decade, the potential growth rate based on Cobb-Douglas production function estimations now stands in the range of 1.5-2%, a relatively low level



compared to other high-income non OECD islands. What are the factors hampering growth? From a qualitative perspective, among the issues that were often quoted as obstacles to growth from discussions with stakeholders and economic agents in Curacao were the following: inadequate skills; the emergence of new growth headwinds related to export competitiveness (e.g. rising emerging economies and trade regionalization), international governance (e.g. money laundering and transparency requirements), and climate change; the permanence of “imperatives” or “constraints” that are related to the small size and geographic location of Curacao.

Alternatively, the qualitative analysis has shown diverging views among stakeholders on the following: the urgency in ameliorating growing external and domestic imbalances, knowing that a judgment of error on the issue may have long-reaching implications on any sustainable development path; the elements that explain the low level of both aggregate savings and investment in the country (e.g. lack of “investable opportunities”, insufficient returns, and funding issues) along with potential solutions; and lastly the most pressing or highest risks to the island’s long-term sustainable development path, implying that definitions of priority differ.

To shed some light on the long-term macro issues and potential for accelerated development of Curacao, we first address the general issues facing small island economies, before conducting a thorough “growth diagnostic” using one of the most powerful “theoretical tool-kit” for such diagnosis. Thereafter, some conclusions on the potential alternatives and policy choices are provided.

## **2. Small Island Economies and Growth**

The exact growth drivers of small island economies remain a theme of debate. Nonetheless, there are certain factors whereby we find general agreement, e.g. that the constraints and economic structure of these island economies are quite different than others. In addition, they face relatively more challenges than other states while at the same time harbor unique inherent strengths. We address some of these elements in turn:

### ***a. Population***

Small populations severely limit domestic labour markets and thereby preclude labour-intensive industrialization, as islands are unable to compete in low skilled labor-intensive export sectors. According to Srinivasan (1986), due to insufficient domestic demand economic activity as a result often fails to achieve the critical mass necessary to satisfy the minimum scale required to achieve scale economies (the so-called Minimum Efficiency Scale). On the empirical end, attempts to examine the relationship between small size and growth have been hindered by a myriad of methodological and data problems, particularly with regards to the limited length of time-series data (Armstrong and Read, 2003).

***b. Human capital***

Emphasized within the literature, the stock of human capital is an important component of economic growth, especially in environments that face labour constraints. It has a central role in the endogenous growth literature and is closely associated with labour productivity and long-term growth (Aghion and Howitt, 1997). Consequently, investment in education and training is expected to augment the domestic skills base while bolstering productivity and growth in the long-run.

Moreover, human capital also enhances the capacity to absorb new technology, critical to islands as they lack local sources of R&D and innovation (Briguglio, 1995). Combined with an open trade policy, this further supports growth by enabling the economy to better benefit from interaction effects with the technology embodied in imports. Hence, for island economies to compete at a global level and increase potential growth Bhaduri et al (1982) and others find it critical that islands move up the value-chain by improving the quality of the workforce via greater investment in education services. This would suggest that economic prosperity for small island economies is best achieved by accumulating human and/or physical capital instead of making investment decisions solely based on the priority of job creation. In cross-country studies using endogenous growth models, results have shown that human capital significantly contributes to output expansion (Edwards, 1998).

***c. Domestic market***

A small domestic market reduces the potential for competition because of a small number of incumbent firms. Hence, islands are susceptible to the development of monopolies or oligopolies, placing upward pressure on prices and hampering competitiveness. The cost of living on islands can thereby be expected to be relatively high, stemming from a combination of size and competition effects (IMF, 2003).

UNCTAD (1997) identifies four types of small islands, three of which are common. First, we have economies that depend on external rental income, primarily overseas remittances by migrant workers. This will differ between islands that lack an indigenous productive base and those that have limited productive activities. Second, islands that heavily depend on commodity exports wherein there are two types, those that are relatively undiversified and often lack supporting services and those that are more diversified with better developed inter-sector linkages. And the third category refers to islands that rely on earnings from services, mainly tourism and business services, including offshore finance.

Empirical studies on the interaction between sector specialization and growth in small states highlight that robust economic activity is associated with rich natural resources and a strong service sector, especially in financial services and tourism (Armstrong and Read, 2000). Both are linked to rising domestic wealth, while tourism is considered an important source for employment.

#### **d. International trade**

With an undersized labour pool, economies of scale constraints and a small domestic market, islands often become highly specialized and relatively undiversified in output and export base (Armstrong and Read, 2003). Consequently, this leads to greater reliance on a modicum of economic activities, exports and export markets, thereby exposing the economy to external shocks in the form of export prices and earnings (Easterly and Kraay, 2000). Furthermore, the impact of external shocks is greater for these small-open economies, as islands have little influence on international prices and cannot compensate for any deterioration in their terms of trade by increasing the volume of exports, due to limited domestic supply. A common solution to export concentration and instability would be to promote diversification; however, the extent for diversification is constrained by the size of the domestic economy.

The dearth of locally sourced product diversity implies not only that consumption is highly dependent on imports but also the presence of considerable difference between the patterns of domestic production and consumption. In turn, unlikely to be a major source of autonomous self-sustaining growth, a small island economy must pursue a highly open trade regime and be closely integrated with the global economy (Easterly and Kraay 2000). This openness has ramifications for the balance of payments and local exchange rate. Several islands have opted for exchange rate stability at the expense of losing domestic monetary policy autonomy and either fixed the exchange rate or joined a hard currency area (Chadha, 2002).

#### **e. Location**

Proximity to and interaction with regions comprising relatively prosperous and high growth countries may also have beneficial effects, suggesting that regional location rather than isolation may have an important influence on the performance of island economies. This implies that the significant role of location to growth is likely to be the result of the critical importance of trade and the proximity to large prosperous markets. Empirical analysis evaluating the impact of location on the growth of island economies show that regional location is positively related to per capita incomes (Armstrong and Read, 2001). The strength of regional markets is found to be a predominant locational influence.

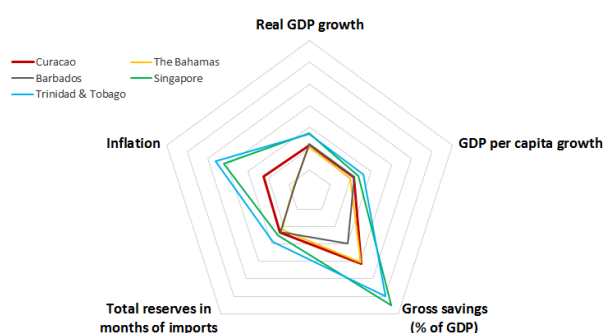
Although some general lessons can be derived from the above factors, it is unlikely that there can be a single model for growth in island states. Some challenges are a permanent fixture to island economies, e.g. small size and vulnerability to external shocks, while others can be overcome, e.g. low potential growth. Based on the above, no effective strategy to raise long run activity, especially for those in the third classification of UNCTAD's typology of islands (such as Curacao), is going to succeed without placing human and/or physical capital accumulation as a central component, as this

is interlinked with greater competitiveness, productivity and by extension growth. In addition, openness to trade requires the export sector in island states to be internationally competitive, i.e. based firmly on their comparative advantage. Therefore, this implies specializing in activities that are relatively more human capital-intensive, including higher value-added manufacturing and services.

### 3. International comparison and macro-benchmarking

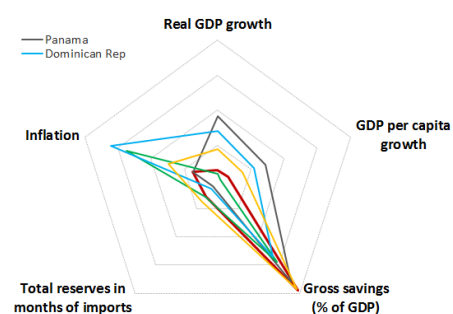
Here we select structural and cyclical variables, based on available data, across a number of countries to identify potential economies that can serve as benchmark cases. After much consideration, two groups were selected, one middle-income and the other non OECD high-income. Within the former classification (group 1), Panama, Mauritius, the Dominican Republic, and Jamaica are included. On the other hand, the latter classification (group 2) is comprised of Barbados, the Bahamas, Singapore, and Trinidad and Tobago. After taking the 5-year average (2004-2008) of the selected variables, i.e. real GDP growth, GDP per capita growth, total reserves in months of imports, and gross savings, we constructed a web diagram for each economy within both groups. The illustrations below highlight that Curacao's economic composition is more akin to group 2. This is apparent when Curacao is compared to the average shape produced by group 2, i.e. the shaded grey area, suggesting that other members within the group better resemble the island. Although Singapore and Trinidad and Tobago differ with regards to inflation and gross savings, which partly explains why real growth is relatively more robust, the remaining Caribbean islands have a similar shape, especially the Bahamas. Conversely, this relative uniformity is absent with respect to group 1. Unlike Curacao, the majority of the group displays problems with inflation. Moreover, we observe varying strengths in real GDP and per capita growth, commonly exceeding the rate posted by Curacao.

Figure 4 Benchmarking: Curacao versus group2



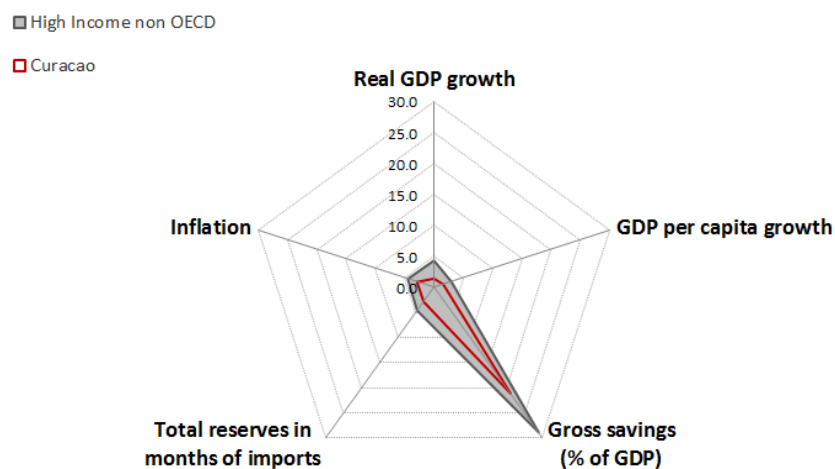
Source: WB, CBS, IMF, Central Bank Van Curacao

Figure 5 Benchmarking: Curacao versus group1



Source: WB, CBS, IMF, Central Bank Van Curacao

Figure 6 Benchmarking: Curacao versus group 2 average



Source: WB, CBS, IMF, Central Bank Van

Given that it is the purposes of this study to isolate what is hampering Curacao's growth performance, it understandably falls within the grey area. Furthermore, the difficulty in reigning in the current account deficit is noticeable when we consider the distance of gross savings from the group 2 average, which by far represents the largest gap.

Meanwhile, the age distribution among the members of group 2 appears almost identical with a sizeable share of the population in the 15-64 age range. Nonetheless, there are marginal differences. Within the group the Bahamas seems to have a slightly higher proportion of those within the age range of 0-14 whereas Curacao has a slightly higher population of those 65 years of age and older. In terms of economic structure, four of the five island economies have a dominant services sector, equivalent to nearly 80% of total output, with Trinidad and Tobago being the exception due to its noteworthy endowment of natural resources.

Figure 7 Age structure, %

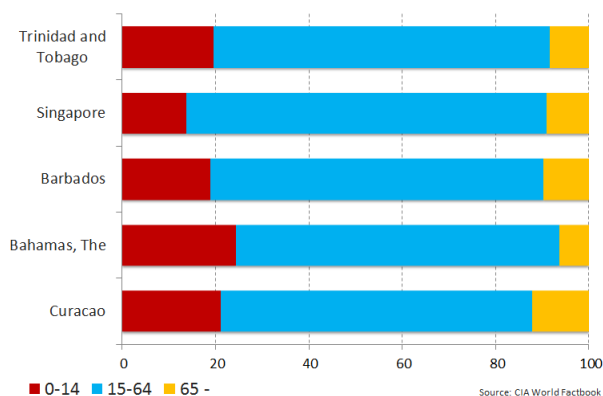
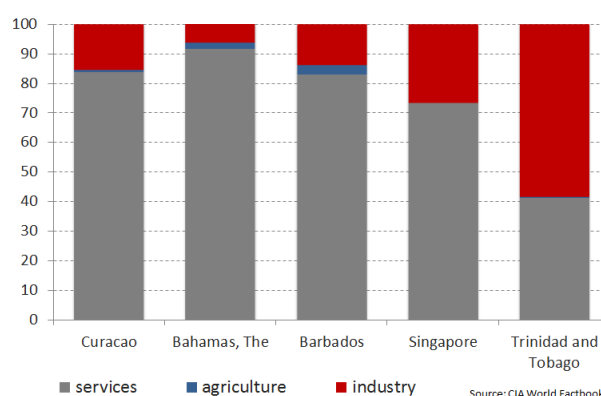


Figure 8 GDP Composition, %

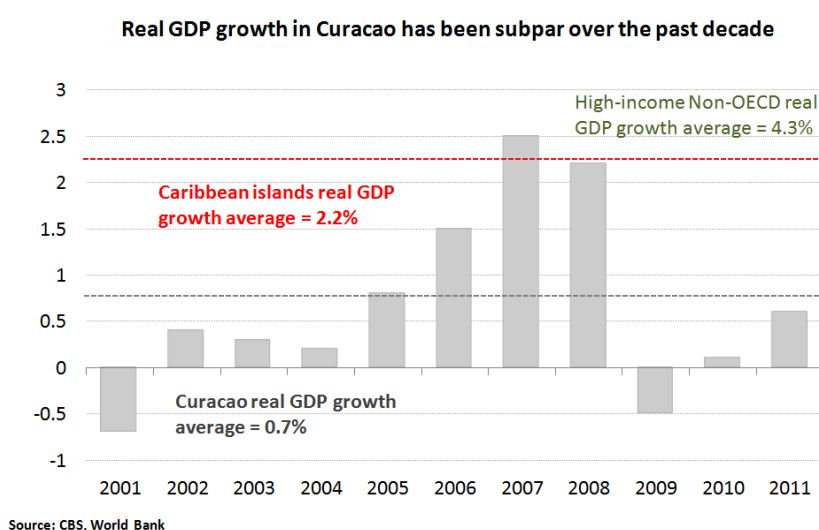


In the even data is available, going forward these islands will be utilized as benchmarks alongside regional averages, particularly in the growth scenarios section and throughout the growth diagnostic, which is the subject of the upcoming discussion.

#### 4. Growth Diagnostic: Introduction

Among a handful of high-income economies in the Caribbean basin, Curacao has a high standard of living with GNI per capita above USD 12476<sup>14</sup>, far above the 2010 regional average of USD 8294. Capitalizing on its geographical position and constitutional arrangement with the Netherlands, the island economy relies heavily on the tradable sector, especially in the area of services. Moreover, cognizant of its lack of natural resources, the economy has adapted by largely depending on the success of service exports from the tourism, international financial services, shipping and oil refining sectors. In fact, CBS data highlights that the services sector accounted for more than 80% of GDP in 2010. Prone to external shocks and with an undiversified export base, economic growth has been quite volatile and abysmal. The Caribbean-wide 10-year growth average ranges from 2.5-3%, meanwhile Curacao has struggled to sustain anything above 1% over the past decade. According to the CBS, real growth is set to come in at 0.6% for 2011. This continues more than a decade long of abysmal figures. Compared to high-income islands in the region, this is well below that of the Bahamas (0.97%), Barbados (1.3%), and Trinidad and Tobago (5.97%). Although Trinidad may not be the best comparison, given its size and industrial structure, more importantly Curacao underperforms relative to the other two islands which have somewhat similar economic compositions.

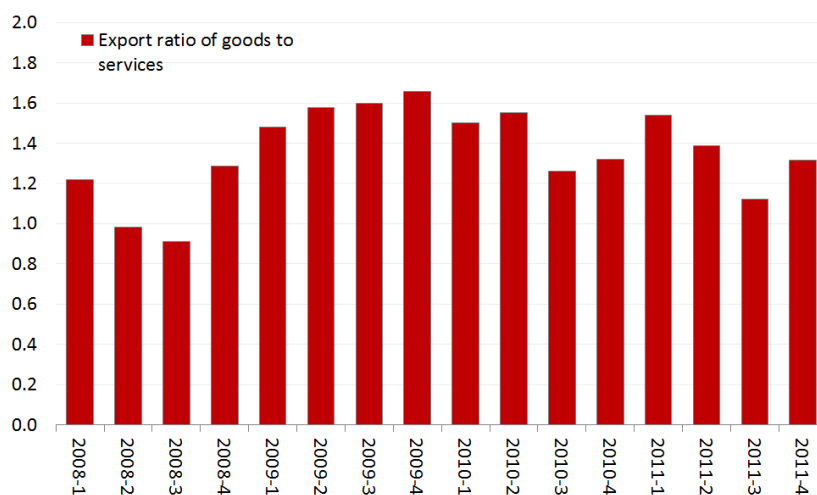
Figure 9 Real GDP growth in Curaçao



14 The figure refers to the World Bank's threshold whereby a higher per capita level would classify a country as high-income.

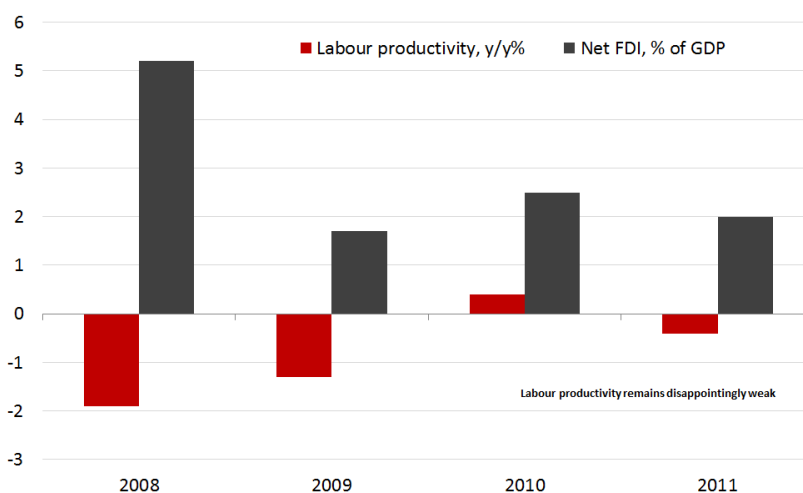
Moreover, labour productivity is distressingly low. At least since 2002, IMF statistics indicate that productivity has been on a general decline (-1.9% in 2008 and -1.3% in 2009).<sup>15</sup> If long-term sustainable growth is of central concern, this needs to be improved. With real economic activity registering below 1% on average over the past decade amid a general decline in labour productivity, it begs the question: what is constraining long-run growth?

Figure 10 Ratio of exports, goods versus services



Source: Central Bank van Curaçao en Sint Maarten, TAC

Figure 11 Net FDI and productivity lagging behind



Source: IMF, World Bank

Anecdotal evidence points to several potential constraints, including a lack of viable domestic firms to investment in, the high cost of labour, and an onerous tax system. For policy reforms to be effective one needs to discriminate between symptoms and causes and only after engage in a process of prioritization to evaluate what causes would offer immediate and long-term returns if removed. To achieve this, we employ the growth diagnostic approach of Hausmann, Rodrik, and Valesco (2005)<sup>16</sup>

<sup>15</sup> For data prior to 2008, we are referring to Netherland Antilles data. According to a Standard & Poor's Curacao January 2012 report, "A rule of thumb is that Curacao represented roughly 72% of the total economy of the Netherland Antilles."

<sup>16</sup> See details in Appendix

to identify the most binding constraints to private sector growth. This approach differs from common techniques as it takes into consideration historical and institutional differences while attempting to prioritize the areas in need of intervention, as noted in Leipziger and Zaghera (2006) and World Bank (2005).

**a. Growth Diagnostic: Data resources**

In putting the diagnostic into operation we consider direct and indirect evidence from both domestic and other sources, particularly multilateral financial institutions such as the IMF and the World Bank.<sup>17</sup> Cognizant of the intimate interactions between macro and micro variables, we employ both aggregate and industry-level data. Moreover, the extant data is complemented by business and investment climate surveys. In an attempt to extend the time-horizon of the extant data, for years before 2008 Netherlands Antilles statistics were utilized as a proxy. For Curacao, the island's recent autonomous status within the Kingdom of the Netherlands and dearth of relevant statistics as well as limited time-horizon has functioned as an ever present constraint in our isolation of identifying the most binding growth constraints.<sup>18</sup> Thus, the following conclusions should be interpreted as tentative. Nonetheless, the exercise highlighted a few key constraints, which we discuss later in this section. We present the analytical methodology of the HRV approach in the attached annex.<sup>19</sup> Hereafter, we apply the framework to Curacao and address potential reform strategies.

**b. Growth Diagnostic: Application to Curacao**

**Is private investment low?**

A first glimpse at the extant data appears to suggest that investment is robust relative to international standards. From 2002 to 2008, investment-to-GDP was in the neighbourhood of the average Caribbean and high-income non-OECD economy. However, this has increasingly been funded by foreign borrowing. In a normal situation, foreign borrowing for investment may not be an overwhelming concern for a moderately sized economy with a relatively modest current account deficit/surplus, but island economies often depend heavily on imports and the export sector is constrained (small size, higher costs, and relatively less competitiveness). Hence, there is a stronger need to secure sufficient foreign reserves. In the case of Curacao, the current account deficit is large compared to island

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17 To allow for the possibility of international comparisons, much of the data was sourced from the IMF.

18 In line with our general experience, the most recent IMF Article IV asserts that, "Data provision has serious shortcomings that significantly hamper surveillance."

19 Of critical importance is to recognize that this diagnostic attempts to highlight persistent constraints using a long-run perspective and thereby the need to consider a longer time-horizon beyond 2-5 years. Moreover, the extant data on Curacao essentially begin during a crisis period and thereby renders an understanding of what normal conditions look like quite challenging. Hence, this informs our use of Netherlands Antilles data and the general attention to broad themes, which at times may conflict with short-term fluctuations.

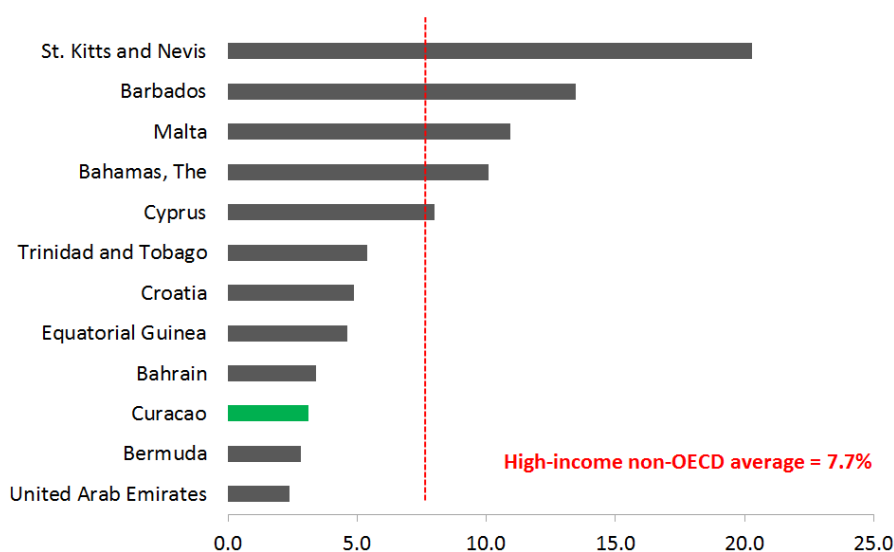


counterparts and there are some concerns regarding foreign currency reserves, which according to central bank data on the Netherlands Antilles has historically struggled to sustain 3 months of import cover (2003-2008). Consequently, the increasing pace of foreign borrowing to fund domestic investment warrants some caution.

Over the same period, as domestic investment gained at an increasing pace, registering double-digit rates by 2006, the proportion funded by foreign capital grew from 8% to 54% by the end of 2008, eventually accounting for more than half of local investment. This activity peaked in 2008 at a current account deficit equivalent to 26% of GDP and thereafter eased, but seems to have resumed in 2010 wherein the deficit hit a new record at 31%, according to IMF data. This appears to suggest a growing dependence on foreign funds, which is unreliable by nature and especially so amid a climate of heightened risk aversion and uncertain global economic conditions.

Alternatively, foreign direct investment (FDI) has accelerated for much of the past decade, which is a plus as it is not debt generating while being a stable source of investment. As a share of GDP, FDI recorded 4% and 5% in 2007 and 2008, based on IMF statistics. Despite an uncertain global environment, the share has remained steady between 2% - 3% for every year thereafter. Moreover, the average share of FDI over the past five years amounts to 3.2%. However, when we only consider non-OECD high-income countries Curacao is noticeably below the average (7.7%) by about four percentage points, more than double its current figure. Likewise, the shortfall is sizeable when comparing the same metric for the Caribbean basin. This low level of investment may speak to relatively weak degree of FDI attractiveness, the impediments of which relate to competitiveness and productivity, a subject of later discussion. Furthermore, much of this investment does not appear to be broadly shared across sectors but seems to largely concentrate in the financial sector. In 2011 alone, the 'Financing, Insurance, Real Estate & Business Services' sector absorbed about 60% of inbound FDI, 27% of which went to 'Offshore & Other Services', according to central bank statistics.

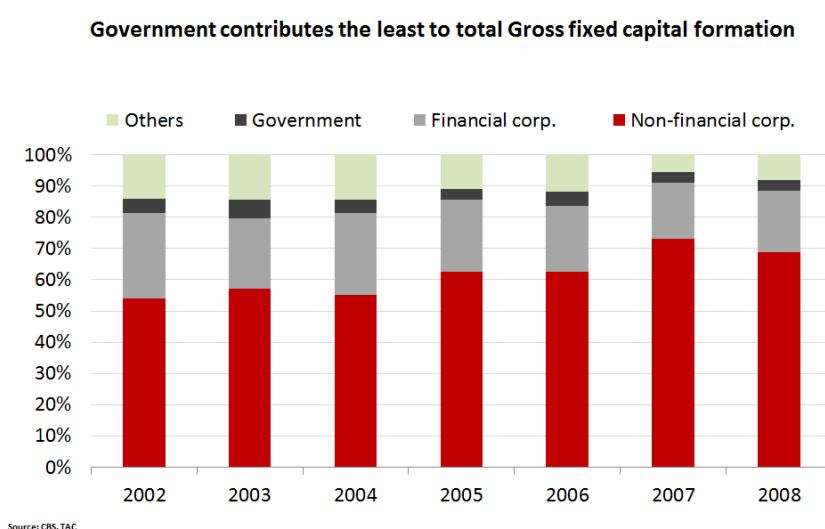
Figure 12 Net FDI (2008-2010), % of GDP



Source: IMF, World Bank, TAC

Similarly, CBS data indicates that the bulk of private investment goes into three sectors: ‘Financial intermediation’, utilities (‘Electricity, gas, and water’), and ‘Transport, storage, and communications’. Home to less than 40% of firms,<sup>20</sup> in 2008 the aforementioned sectors represented nearly 70% of total private investment. Alternatively, domestic credit from commercial banks to the private sector has more or less sustained double-digit growth since 2004. However, the share allocated to enterprises has been on a decline since 2006 whereas mortgage loans have been on the rise, comprising more than 35% of loans in 2009.<sup>21</sup> In other words, the majority of loans have increasingly gone into mortgages, not necessarily institutions that would directly support investment. In fact, credit allocation to the private sector as a share of GDP has underperformed relative to the high-income non-OECD average (+80%) for more than half a decade, albeit it is gradually improving.

Figure 13 Contributions to Gross Fixed Capital Formation



Hence, this leaves one with the question: what is keeping private investment relatively low in Curacao, high financing costs or low rates of return? The answer is likely to be a mix of both.

### Are external financing costs high?

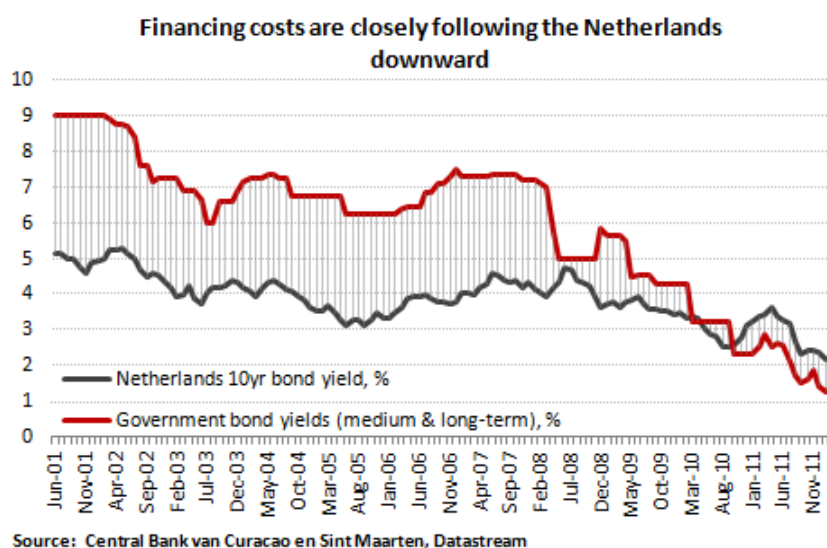
Several variables appear to indicate that external financing costs are not an impediment. In terms of foreign investor risk perception, considerable debt relief and close relations with the Netherlands have benefited Curacao's sovereign risk profile with S&P giving the small island economy an A- rating. In fact, debt relief reduced general government debt to GDP from 56.3% in 2007 to just above 30% in 2011 while the interest to revenue ratio fell by more than 10 percentage points to below 4%. As part of the agreement to dismantle the Netherlands Antilles, Curacao issued Naf 1.6 bn worth of debt and nearly the total amount was purchased by Dutch authorities. Moreover, the Netherlands has a standing subscription on all debt issued by the island, which would be purchased at rates similar to

20 Calculated from data in *Curacao Economic Outlook* 2010.

21 Netherlands Antilles is used as a proxy and is taken from IMF data.

those observed on its own government bonds (refer to figure below). In turn, the effective yield on medium- and long-term bonds for Curacao has closely trailed the 10-year Netherlands bond downward, moving in almost parallel fashion after the second-half of 2010. Within a span of three years the yield demanded by investors has fallen from 5.65% (Jan. 2009) to 1.37% (Jan. 2012), this is quite low. Even if the Curacao's gross external debt to GDP ratio were compared to regional peers, according to IMF data, it sits comfortably close to the regional average at 54.6% of GDP (2010).

Figure 14 Financing costs



When we take into account a strong credit rating, low government debt, and a standby buyer to purchase Curacao debt at a nominal rate, suggests external financing costs are not a constraint.

### Is local financing inadequate?

There seems to be a few signs to imply that bottlenecks may be present within the domestic financial market. However, does this stem from a lack of domestic savings or problems with financial intermediation? These bottlenecks seem to source from both. In terms of domestic savings, any tightness in supply should show up in rising deposit and lending rates. Using central bank data, the lending spread (lending – deposit rate) is comparatively low, below the near 8% average (2010) observed in neighbouring islands. This spread is driven by declines in both current account overdrafts (lending rate) and passbook savings (deposit rate). Being a beneficiary of debt relief in 2010 has partly contributed to the decline. In fact just prior to receiving support, excess commercial bank reserves were all but exhausted (2006-2008) with the lending rate showing strong upward movement over the same period, during which time we observe the nascent beginnings a moderating trend in credit to the private sector from a 10-year high of 13.3% y/y to just above 5% y/y by 2009, according to IMF data. Thereafter, commercial bank liquidity (demand deposits) surged in line with the current

account deficit to 30.9% of GDP in 2010.<sup>22</sup> When considering the gambit of non-OECD high-income economies across the globe, from Barbados and Singapore to Cyprus and Malta, it is not uncommon to find current account deficits, or foreign savings, slightly above 10% of GDP. However, this is not the case for shares in the neighbourhood of 20%, as consistently displayed by Curacao since 2007, according to IMF data. Even if we were to exclude the impact of temporary cyclical factors, IMF estimates for Curacao and Sint Maarten reveal current account deficit to GDP figures above 14% throughout the past few years (2009-2011).

Figure 15 Lending spread (lending rate – savings rate)



Source: Source: Central Bank van Curacao en Sint Maarten, TAC

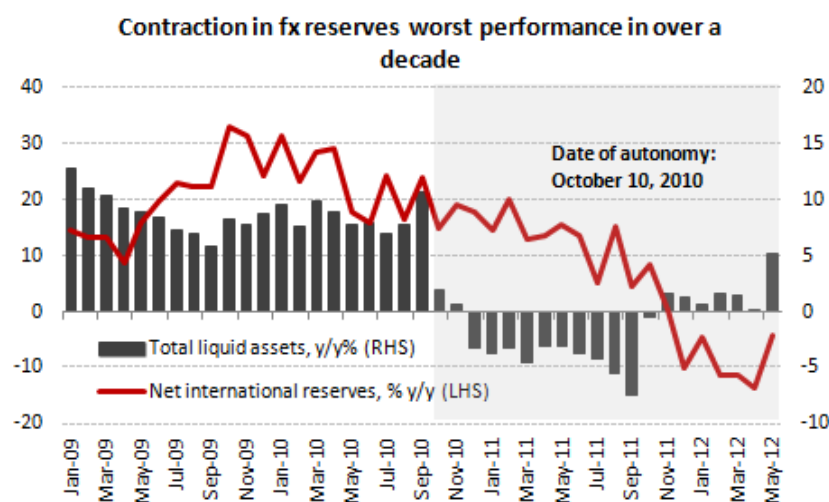
The decline in international reserves and demand deposits since the first-half of 2011 amid relatively robust imports of goods and services seems to suggest the presence of an underlying constraint. Despite removing 34.8% of GDP off the government's balance sheet, the fx reserve savings appear to have done little to offset the deterioration in foreign exchange reserves, declining from 4 months of import cover in 2010 to 3.7 months in 2011, according to central bank data. More importantly, this attenuation of reserves has escalated since December 2011. Indeed, at this rate import cover may not only approach the 3 month mark but possibly fall below this critical level. Notwithstanding the impact of elevated oil prices, waning external demand, and a decline in foreign exchange receipts from the international financial services sector, a key reason that motivated the considerable shortfall in 2011 is the decline in net current transfer from the Netherlands, confirmed by central bank President Dr. Emsley Tromp within the 2011 annual report,<sup>23</sup> implying that the island economy needs to consider alternative foreign exchange generating measures. In other words, although the domestic market appears relatively liquid, inadequate domestic savings was a challenge prior to the liquidity infusion and for the moment remains masked. Given the absence of a clear policy to remedy this ailment, the

<sup>22</sup> The impact of current transfers on the current account was most significant in 2011 wherein its contribution to the current account turned negative for the first time since at least 2007, according to central bank data.

<sup>23</sup> Although there was some improvement in the trade and services balance in 2011, much of this was offset by the decline in current transfers. Since at least 2007, current transfers were positive contributors to the current account balance, with the largest contribution witnessed in 2009 and 2010.

accelerating decline in commercial bank liquidity and rising accumulation of foreign savings seems to reflect this underlying problem.

Figure 16 Foreign exchange reserves



Source: Central Bank van Curaçao en Sint Maarten, TAC

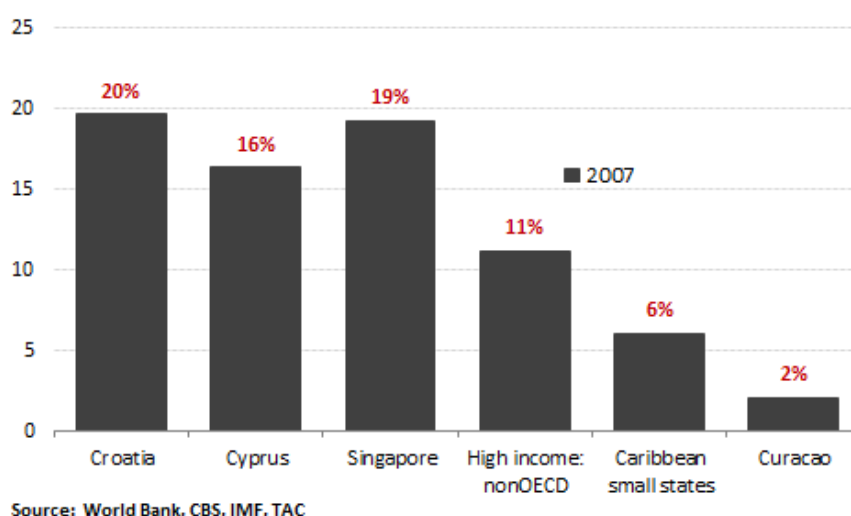
In this context, one of two things can be done to replenish reserves in the short-run: accumulate external debt or increase investment. Given that the first option would likely exacerbate the current account deficit by feeding consumption demand, it would make sense to provide targeted credit support to increase investment, particularly in the external sector. However, there appear indications that financial intermediation constraints are present. According to a recent CBS survey, the leading obstacle to investment in June and December 2011 remains inadequate access to financial resources. If we were to take a glance at the history of credit allocation to the external sector, it is not until recently that yearly credit flows begin to exceed that disbursed to the domestic sector. Otherwise, credit to the external sector has been relatively limited. In sum, a combination of inadequate savings and deficiencies in financial intermediation has played a part in suppressing investment. Nonetheless, there is reason to believe that these elements may simply be a response to a low return uncompetitive business environment, a claim we investigate next.

### Are returns to economic activity low?

If the financial sector in Curacao, particularly pension funds, were to be asked to invest more domestically, according to anecdotal evidence, “where?” would likely be the response. For reasons related to either low returns to investment or few viable investment opportunities several firms in the financial sector, until the recent Dutch purchase of the island’s debt, allocated the vast majority of capital towards bonds. Now that much of it has been sold to Dutch authorities, it would be reasonable to expect a notable pickup in investment. In fact, credit growth did rebound in 2010 but this was not accompanied by a proportionate gain in private investment, based on IMF data, as investment growth contracted by 1% y/y while private consumption advanced by 8.9% y/y.

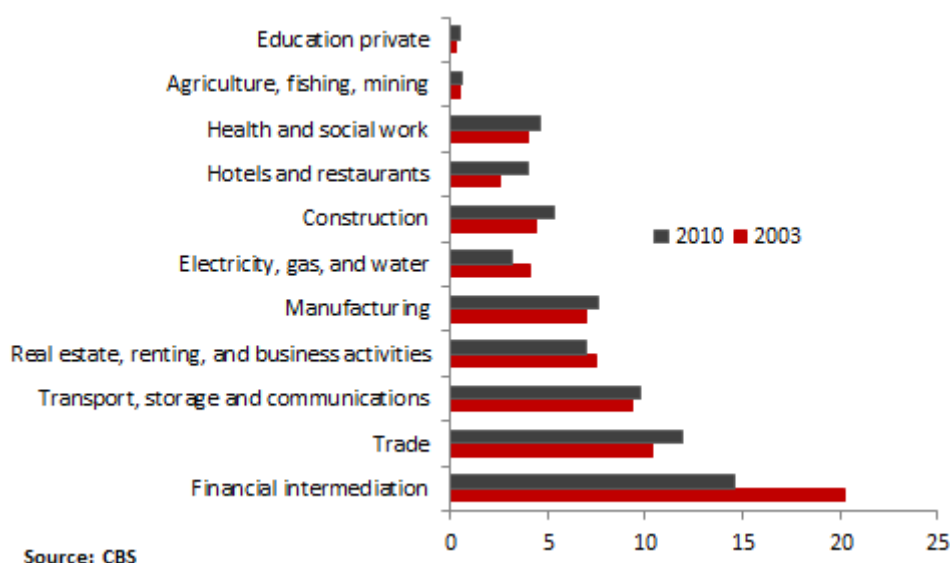
One way to measure the productivity of capital or the rate of return to capital is by taking the ratio between real GDP per capita growth and the investment share of GDP. According to Favaro (2005), economies with high investment share on average have relatively high per capita GDP growth. Thus, it comes to no surprise that the rate of return on capital in Curacao is on the low side at 1.2% when averaged over the 2003-2008 period. Although not unfounded for high-income countries, the island's GDP per capita growth is unusually low at an average of 0.4%. The presence of poor investment returns is confirmed when compared to regional or income classification averages. Over the same period, Caribbean Islands, small states, and high-income non-OECD countries in general recorded rates of return north of 10%. Curacao did manage to narrow the gap with regional counterparts in 2007 and 2008, however, this was short-lived.

Figure 17 Rate of return on investment ratio, %



Meanwhile, aside from the “agricultural” and “electricity, gas, and water” sector, which are not expected to contribute much to the productivity of capital, the performance of the “education private” and “health and social work” sectors have lagged behind from 2003-2008. These are two sectors that although have gradually increased their share of total output continue to make subpar contributions to growth, especially the education sector. Moreover, CBS data indicates that the one sector that continues to be the leading growth contributor, i.e. “financial intermediation”, has posted a notable decline in economic activity as a share of total output from a peak of about 20% in 2003 to 14% in 2008. With critical sectors for human capital augmentation underperforming on the one hand and with the one sector that employs the largest pool of skilled labour losing overall output share, labour productivity has struggled to accelerate, which has negative implications for a sustainable advance in real per capita growth. This is a historically endemic problem that Curacao has inherited from its time as part of the Netherlands Antilles wherein productivity growth from 1998-2006 routinely came in south of 1%, save for the blip in 1998 and 2001, averaging 0.17% per annum.

Figure 18 Sector contribution to total economic output, %



Low returns on investment can root from different factors. These can be microeconomic and macroeconomic in nature, from an overtaxed state to fears regarding major shifts in growth conditions. In the subsequent discussion we attempt to evaluate the underlying causes and identify the binding constraints.

### Is this due to low social returns and/or appropriability?

One explanation of low returns from economic activity can be low social returns. The driving forces can potentially be many but they often include missing complementary factors or inputs an individual investor cannot provide. For instance, critical infrastructure like roads, power, and telecommunications may be unavailable or dilapidated, depressing the returns that can be reaped from projects requiring them. Alternatively, the labour with the necessary skills set may be scarce or difficult to hire, rendering these human resources either costly to employ and thereby considerably eroding investment returns.

In terms of geography, the economy faces challenges that are simply part of island life, such as the limited landmass for economic activity and investment opportunities to expand with only 444 sq km of land. Compared to the surrounding islands, it appears to be among the most isolated in the Caribbean region, being closer Venezuela than the majority of Caribbean islands. With respect to infrastructure, there appear to be no serious bottlenecks. The island has a respectable airport and a port envied by regional peers. Four ports<sup>24</sup> are administered by the Curacao Ports Authority (CPA), while owning the infrastructure plus the majority of the superstructure of the ports. The quality and management of these ports have been lauded, being selected as the “Most Dependable Caribbean Port” by the Caribbean Shipping Association three times since 2000. The communication infrastructure is above-average, with the teledensity among the highest in the Caribbean. As of 2005, the majority of about 25 internet providers in the Netherland Antilles were located in Curacao. Regarding electricity and water,

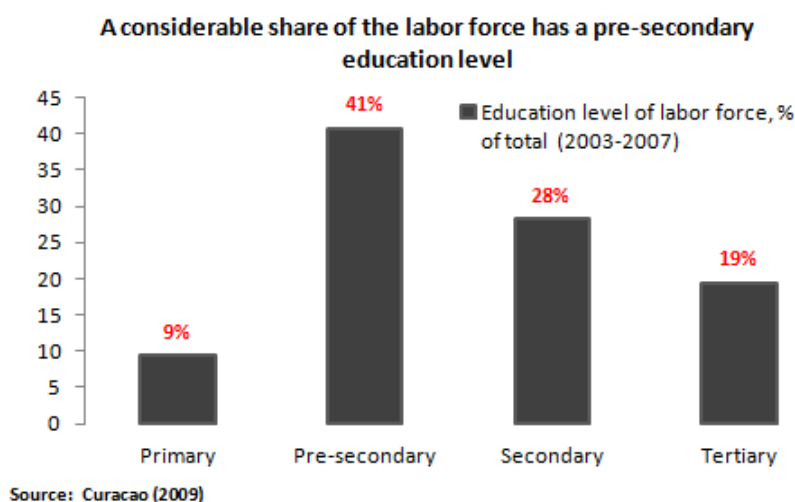
<sup>24</sup> These four are considered ports by the port jurisdiction. Otherwise, the CPA administers more than 8 ports.



production and distribution are adequate; however, the cost of energy is relatively high at around USD 0.37/kwh, with government proposals looking to raise the rate to USD 0.42/kwh, while the cost of water is exorbitantly high, due in part to a leakage of about 25%, an obsolete distribution system, and elevated energy costs. Overall, the above implies that the island's infrastructure is not a central driver of low returns.

From the low social returns angle, attention falls squarely on low human capital. With the highest literacy rate in the region and a multilingual population, it is not obvious at first glance. However, there appears to be a noticeable gap between labour demand and supply. Moreover, the island has a high drop-out ratio of above 40%. Although low when compared to other Caribbean islands, Curacao is not a middle-income economy and therefore the rate is considered high. In 2007, only 41% of the total workforce had pre-secondary education whereas 30% and 20% went on to complete secondary and tertiary education, respectively. For much of the labour with a pre-secondary education or less, the OECD has highlighted that wages are high relative to productivity levels. Indeed, the minimum wage currently stands at more than USD 4/hr, according to CBS, leaving it regionally uncompetitive. With mainly a low-skilled labour pool, firms in Curacao are as a result facing a shortage of skilled labour. This is an issue in sectors such as “financial intermediation” and “transport and communication” wherein a sizeable share of the skilled labour is hired. As reinforcement, anecdotal evidence purports that the educational system has been inadequate in meeting the needs of employers.

Figure 19 Education level of labour force

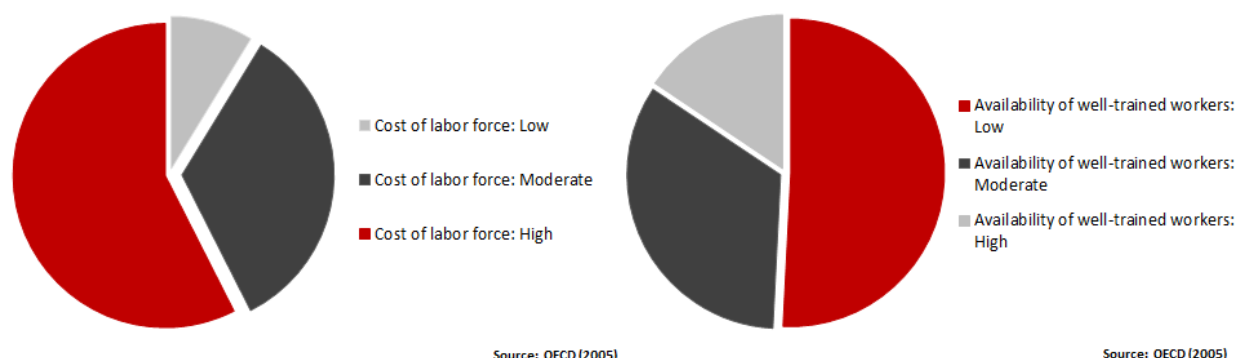


Furthermore, a sizeable share of the relatively educated population is known typically to seek employment in either Europe or the US. This may be a common reality of island economies, but Beine et al. (2007) find that the Caribbean region has the highest degree of brain drain (74.9%) among small-states. Given Curacao's free pass to employment opportunities in Europe, the extent of brain drain on the island may actually exceed the Caribbean average, which only reduces the size of the already scarce pool of skilled labour. According to an OECD (2005) survey, a majority of firms believed that the availability of well-trained workers is low, with the tourism sector expressing the most concern. Lastly, the multilingual advantage of Curacao under closer inspection reveals a low standard



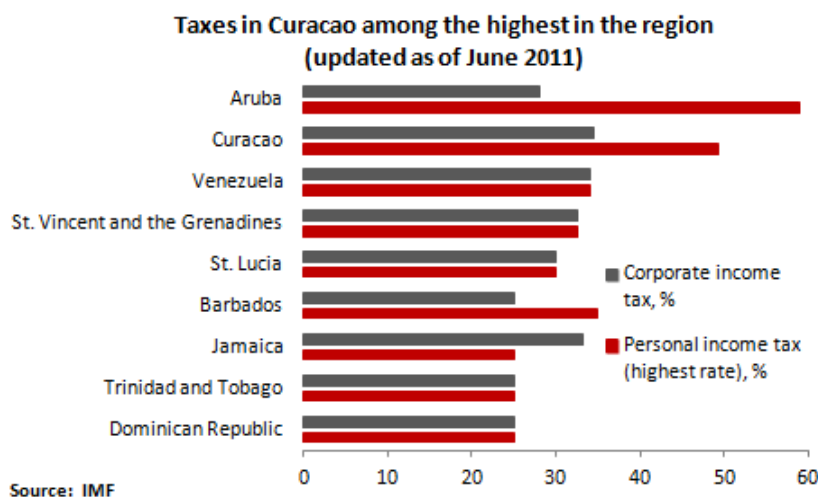
of Spanish/English, as highlighted in the FIAS (2001) report, compared to the level of spoken Spanish/English in Panama, Costa Rica, and the Dominican Republic.

Figure 20 Investors' perception on the labour Market



Alternatively, ineffective government policy shares culpability in keeping appropriability low, especially as it relates to tax, labour, and administrative policies. Notwithstanding the recent introduction of tax reforms, IMF statistics show that the personal income tax in Curacao as of June 2011 was 49.4% (highest rate), second in the region behind Aruba, while at 34.5% the corporate income tax rate was among the highest in the region. The corporate income tax has since been lowered to 27.5%, a notable improvement for the business environment; however, in competitiveness terms it remains above its high-income island counterparts Barbados and Trinidad and Tobago. Often overtaxed populations circumvent making payments by entering the informal/shadow economy, which refers to economic activities that take place outside the formal market. Furthermore, in addition to less corruption and a high degree of rule of law, Johnson et al. (1998) find that relatively low tax and modest regulatory environments manage to collect more tax revenue. Consequently, Carolina and Pau (2007) found that the Netherland Antilles has a relatively large shadow economy, equivalent to 11% of GDP. This is higher than the .03% and 10% share of Barbados (2000) and Trinidad and Tobago (2002), respectively.

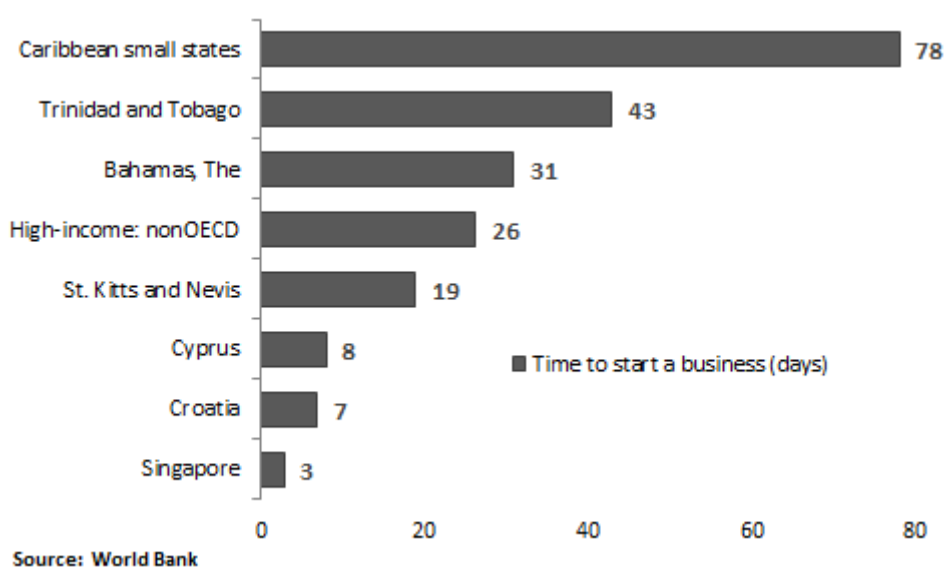
Figure 21 Income tax rates



Also playing a role in the relative size of the shadow economy, another setback to appropriability have been overburdensome labour regulations. The labour market has been described for some time as lacking flexibility and high labour costs. Rigid rules regarding hiring and firing, generous severance pay schemes, alongside the findings in Carolina and Pau (October, 2008) that the jobless have a relatively elevated reservation wage, have helped to place a high floor for wages. As of January 2011, the minimum wage was USD 4.2/hr whereas the rate in Trinidad and Tobago, Barbados, and the Bahamas currently stands at USD 1.96/hr, USD 2.5/hr, and USD 4/hr, respectively. Confirmed in an OECD (2005) business survey, the majority of investors asserted that the cost of labour was high. This is reflective of not only the island as a whole but for every sector.

Lastly, administrative barriers are prevalent. In particular, concerns from the business community have been voiced regarding start-up requirements, obtaining permits for non-nationals and migration regulations. Of the three, the OECD has pointed to the procurement of work permits for non-nationals as the leading source of frustration. Again, this has disproportionately impacted the tourism sector. Meanwhile, it takes from 1-6 months to setup a business, above that of Trinidad and Tobago (43 days), Singapore (3 days), and the Bahamas (31 days). Despite being close to the Caribbean average, this compares poorly against high income non-OECD countries (26 days).

Figure 22 Starting a business - 2011



In sum, the key constraints that appear to be weighing down returns on economic activity partly stem from low social returns due to an inadequate level of human capital and low appropriability due to high taxes, rigid labour regulations, and overbearing administrative barriers. This leaves us with the question: What priority should these constraints take in the reform process?

## 5. What are the most binding constraints?

Now that the main constraints on growth have been identified, we need to make an attempt to highlight the most binding constraints so that policies have a maximum impact on growth, potentially removing one constraint and easing others.

$$Growth = (constraint_1, constraint_2 \dots constraint_n)$$

$$binding_j = \max_{n \in I} \left\{ \frac{\partial Growth}{\partial constraint_n} \right\} \rightarrow \text{maximizes} \frac{\partial Growth}{\partial policy_i} = \sum_{j=1}^J \frac{\partial Growth}{\partial binding_j} \frac{\partial binding_j}{\partial policy_i}$$

To summarize, we identified the following constraints: low human capital, ineffective governance related to micro risks (e.g. taxes, labour regulations, and administrative barriers), poor intermediation, and low domestic savings. Based on the above four constraints, the most binding constraints appear to be low human capital and ineffective government policy. Reform policies targeted to these two areas have the greatest potential in raising trend growth meanwhile reducing the impact of the other two constraints.

Here we have a combination of an over-taxed and under-investing state alongside an inflexible labour market. Suppose the government is able to ease, if not remove, these constraints, private returns should rise and encourage investment, leading to an increase in investment demand. In turn, we would observe a pick-up in the lending rate, which compared to regional standards, is presently below average. The increase in investment demand is likely to ease the presence of poor financial intermediation, as rising returns to economic activity motivates an increase in credit allocation towards a broad set of investment projects, preferably in the external sector. Greater investment in the external sector (e.g. financial services and tourism) and human capital (e.g. education and health) would not only augment the sector's foreign-exchange reserve generation capacity, but also offer the island an opportunity to enhance the quality of goods and especially services exports, thus moving up the value chain. Moreover, the potential productivity benefits from greater capital accumulation, enhanced human capital, and less costly labour regulations would provide a needed boost to export competitiveness, as the share of outbound shipments whether against world or Caribbean exports has generally been on the decline since 2002. For these and other reasons reserve levels are likely to expand, reducing the need for high domestic savings and narrowing the current account shortfall to more sustainable levels.

Cognizant of the need for policy to be politically feasible and cost effective, it makes sense to differentiate between short- and long-term returns. For the abovementioned constraints related to

ineffective governance, reforms can offer relatively higher short-term returns. Alternatively, for human capital investment, much of the fruits of investment will likely be born over the medium – long run. Aside from reforms targeting the two aforementioned binding constraints, other complementary recommendations include: increase incentives for investing in the external sector, establish a trade finance service either through the government or a private-public partnership dedicated to supporting small and medium sized exporters, and foster a more active and effective policy dialogue with the business community.

Our initial analysis would lead us to the following critical elements of choice for Curacao's policy makers:

- First, the optimal balance between having government intervention as a “leading/driving” force, notably for potentially new areas or sectors, and giving priority to a simpler and more flexible business environment. Here, there is a need to balance the fact that small economies highly sensitive to international factors cannot have “large public spending” or “large government” so that they do not create a macro burden on private sector initiative (crowding-out effects, taxation, etc.), with the recognition that there must be a “government-led-start” for some critical industry development, infrastructure supply or funding / financing of higher-risk / stronger spill-over private projects.
- Second, the priorities to be established on trade questions (regional versus global focus) along with bilateral agreements on investment and taxation, as these priorities will have implications in terms of institutional and industry composition.
- Third, the observation of industrial questions coupled with the macroeconomic diagnosis strongly suggests that Curacao is, more than most countries, sensitive to the legal, regulatory and trust environment provided by the authorities.

## **C. Assessment of relevant policies and practices already in place in Curacao**

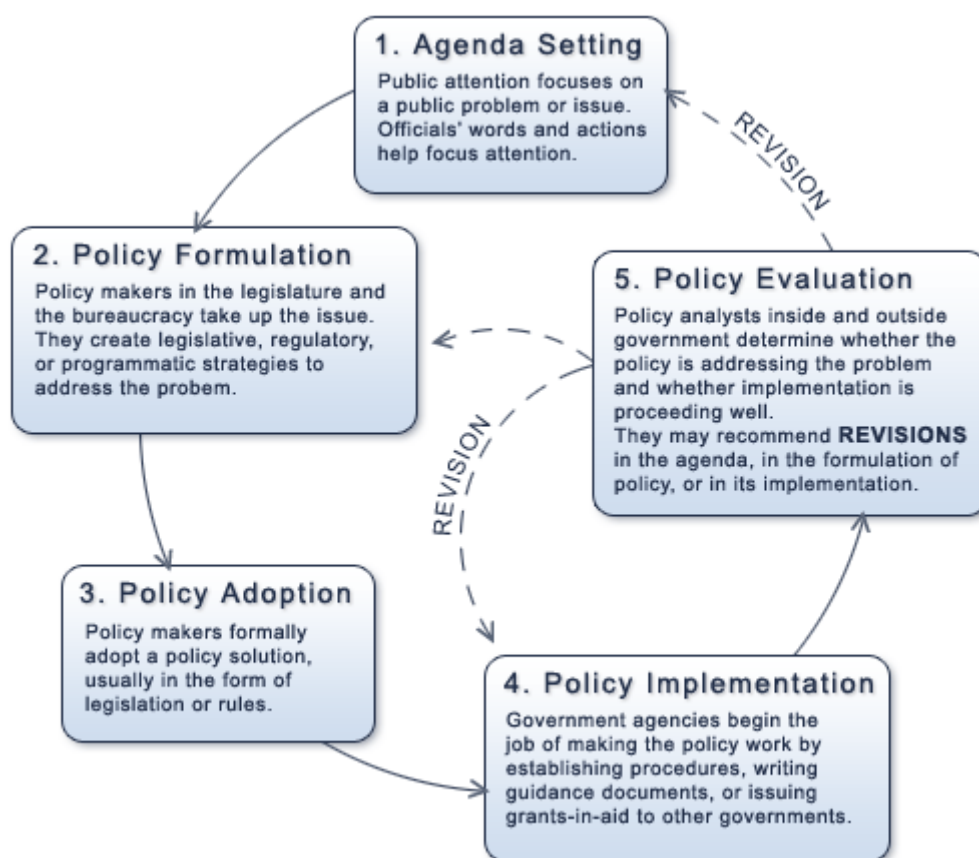
### **1. Process of and capacity for Policy Formulation and Implementation**

Prior to becoming autonomous, Curacao was part of the Netherlands Antilles which meant that policy formulation was the responsibility of both the central government and the island territory. The island territories, such as Curacao, were mainly responsible for the implementation.

The central government would support the island territories in the areas where they were unable to carry out implementation by themselves. Now that Curacao is autonomous, policy formulation and implementation fall under the Office of the Prime Minister and the various Ministries with responsibility

for different sectors of the society. From consultations it appears that Curacao aims to carry out policy formulation and implementation using a framework similar to that laid out in the following diagram.

Figure 23 Curaçao policy formulation and implementation diagram



Curacao has the institutional capacity and the support from International Development Partners and the Kingdom necessary to formulate and implement policies. During the consultation process numerous policies, plans and strategies were referenced and/or shared with the TAC team. However, in reality the Curacao seems to face a challenge in the implementation of policies and plans as this was a recurrent position mentioned in consultations for this study. Furthermore, when policy implementation does take place it is susceptible to being reversed in the next political cycle. This situation has been closely noted by the TAC team and the implementation process will receive significant attention.

## 2. Development strategies (including past plans and lessons learnt)

As mentioned above, Curacao is not short of development plans and strategies going back for several years prior to acquiring its autonomous status in October 2010. Given the relatively short passage of time since autonomy, relatively few plans have been produced since then. However, most plans are

still very relevant because many of the fundamentals have not changed in terms of the economy. Some of Curacao's main plans referred to in this study include the following:

- Sustainable Economic Development Plan (2009)<sup>25</sup> – this report outlines the socioeconomic background, includes a sectoral analysis and a macroeconomic assessment of Curacao and then examines the conditions for sustainable economic development.
- An Economic Policy for Pais Korsou (July 2009)<sup>26</sup> - this study provided a road map to the formulation of the long term economic strategy 2010-2030. It dealt with development and programme objectives, results, the existing macroeconomic framework, and budgets.
- Multi-Year Program (Curacao) 2004-2007, Part II Sub-Programs – prepared by Island Department of Economic Affairs (DEZ) Curaçao, June 2004 – this report examines macroeconomic stability, the business environment, specific sector analysis, supporting policies in education, employment, incomes policy and environment.
- Removing Obstacles to Growth and Restoring Jobs in Curacao: Issues, Strategic Agenda, and Implementation (2008) – Sri-Ram Aiyer, Maarten J. Ellis, and Christopher G. Smeets – this study looked at macroeconomic and structural issues, regulations, the tax system, labour markets, state enterprises, pension and health care costs, access to finance, sectoral priorities, and building consensus especially in implementation.
- The Shadow Economy in the Netherlands Antilles (2007)- prepared by Miriela G. L.Carolina and Lennie Pau – the report paper attempts to measure the size of the shadow economy of the Netherlands Antilles using two distinct estimation methods: direct and indirect approaches. Both methods produced similar results-a shadow economy of the Netherlands Antilles equal to be approximately 11% of GDP.
- Labor Force Development & Structural Proposal (June 2008)<sup>27</sup> - this document (produced by the Commissioners of Economics & Labor, Education & Culture, and Social Affairs) involved a tripartite approach involving government, private sector and labour and deals with issues including productivity & efficiency measures, incentives, status of temporary workers, retraining and retrenchment programmes, creative pay systems & social programming, and legislation.
- A Strategic Tourism Master Plan (July 2010)<sup>28</sup> which outlines the current situation and outlines a set of strategies that could result in different growth scenarios for Curacao

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25 *Economic significance of the island territory of Curacao*, by Working group: Sustainable economic growth Curacao 2009-2024

26 *An Economic Policy for Pais Korsou – Road Map to the Formulation of the Long Term Economic Strategy 2010-2030* prepared by the Executive Council of the Island Territory of Curacao and Department of Economic Affairs

27 *Labor Force Development Policy and Structural Proposal (June 2008)* –Eugene Rhuggenaath, Marilyn Alcala-Wallé, Humphrey Davelaar

28 *Strategic Tourism Master Plan for the Island of Curaçao 2010 – 2014*, prepared by Halcrow Group Limited in association with CHL.

- Tourism Labour Market Curacao (2009-2011): Matching the Demand and Supply Side – A Thesis Commissioned by the CTB and prepared by Clyrette Martinez Reyes – this thesis looked at turnover rates and vacancies in the various segments of the tourism industry and then tried to match this with the supply of appropriately trained persons coming out of schools and training institutions.
- Strategic Plan – Curacao International Financial Services Center Foundation (2011) – the report looks at strategic actions to be taken related to the tax regime, tax legislation, tax treaties, white listings, innovations, product development, rebranding and marketing
- Curacao Logistical Hub Plan<sup>29</sup> - the study looks at issues relating to airlift, the seaport, international trade, financial services, and information transfer
- Qualitative Analysis of Curacao Maritime Developments: Charting Our Maritime Future prepared for the Maritime Authority of Curacao (2011) prepared by Drs. Pieter Agtmaal and Mr. W.W. (Tim) Timmers, Colophon – this report examines the shipping, fishing and yachting sectors.
- SME and Entrepreneurship Policy, March 2012
- A Sustainable Plan for Curacao – Strategic Options for Isla and the Isla Site prepared by ECORYS 2012 (not released) – this study examines different options for the refinery including closing, upgrading or relocating.

Many of the above plans concur on key developmental issues in Curacao such as sectors with the best opportunities (tourism, financial services, logistical hub); macroeconomic issues; labour market constraints; budget constraints; the critical role and need for multi-stakeholder/tripartite dialogue; and the fact that Curacao is ahead of many of its Caribbean neighbours in terms of per capita GDP and other development measures. Another aspect that several studies allude to is the presence of bureaucracy and red tape. It is argued that in order for Curacao to facilitate investors and the business sector, the Government needs to reduce bureaucracy and red tape.

### **3. Bureaucracy and red tape**

According to the IMF (2011) study, the Government has decided to cut red tape and streamline the business licensing and permit regimes, so that the process of forming new businesses becomes timely and predictable. During the Consultations for this study, Government officials indicated their awareness of the need to reduce bureaucracy as there were repeated references to the need to

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29 Curacao Logistical Hub Plan 2016 (2006) – Logistical Hub Group.

replace “red tape” with “red carpet treatment” for investors. Some specific areas of bureaucracy and red tape that cause concern include:

- Cumbersome customs clearing procedures
- Complex labor law regulations and high labour costs (e.g. minimum wage and severance pay) which results in employers being more inclined to use workers willing to work informally.

#### **4. Political Decision Making (and stability thereof)**

In Curacao political decision making takes place in a parliamentary representative democratic system with several political parties with a Governor General as the head of Government. The Prime Minister is the Chairman of the Council of Ministers. Legislative power resides with the Parliament.

Executive power in Curacao resides with the Governor who is appointed by the monarch for a six-year term. The Prime Minister and Deputy Prime Minister are elected by the Parliament for four-year terms. The legislature or Staten comprises 21 members elected by popular vote in Elections that take place every four years.

Given that there are ten political parties in Curacao which all contest the General Elections and have significant numbers of supporters, it is often difficult for any single party to get a parliamentary majority of eleven seats. This means that a coalition government is often required. Coalition governments are often unstable because they are often formed between parties with different ideologies and representing different segments of the society. The most recent Government was formed by a three-party coalition.

A major concern in Curacao is the lack of continuity in development plans because of the regular changing of Governments and the political decision making process. As outlined in the 2009 report *Economic significance of the island territory of Curacao, by Working group: Sustainable economic growth Curacao 2009-2024*: “The last decades can be characterized by constantly changing economic policies. Policies that were introduced by one government were immediately repealed by the next. There was no continuation with regard to the governmental involvement in the process of economic growth & development in an integrated long term fashion. Up till now this involvement of the Federal and island governments is focused on short term and sector/program- specific result, leaving limited room for an integrated comprehensive approach toward economic development.” This reflects a major challenge to long term sustainable development in Curacao and draws attention to the need for public-private dialogue in the development and implementation process in Curacao.



## 5. Public-Private dialogue

During the consultations for this study the Consultants were reminded that implementation of plans is a major challenge in Curacao and one of the causes is the lack of dialogue and consensus between key stakeholders, namely the Government, the private sector and the labour unions. Public-private dialogues have been undertaken in the recent past including Vision Curacao and Kolaborativo, however in each case after initial successes the initiatives have not been sustained because one of the three parties failed to remain effectively engaged in the process.

The causes of the breakdown include changes of Government, Government being too slow to respond, one party claiming that another was not prepared to listen, one party complaining that they were frequently victims of criticisms from the other parties.

It is imperative that a multi-stakeholder dialogue process be embarked upon for the implementation of the long term sustainable plan that will be the outcome of this study. UNDP is in the process of launching a project entitled “*Capacity Development for Nation Building of Curaçao*”, which has as an expected outcome of Participatory Dialogue process to improve and finalise Development Plan. It is recommended that opportunities should be sought to link aspects of the UNDP Project with the implementation process of this project, especially as it relates to the participatory dialogue process and preparing a Development Plan.

## 6. Fiscal Policy

The Curacao Economic Outlook (CEO 2011) explained that in order to remain competitive with regional neighbours and other countries in the Kingdom it was necessary for Curacao to make adjustments in fiscal policy by, amongst other things, moving away from direct taxation to more indirect taxation. Budget neutral tax reforms were proposed including:

- A decrease of the profit-tax rate from 34.5% to 27.5%
- A decrease in marginal tax rates on income
- An increase in the turnover tax from 5% to 6%, and
- A decrease in the excise duty on gasoline and low sulphur diesel

However, currently for Curacao, pressures related to health care and pensions present a significant drag on the budget which may not be sustainable in the long term. According to the IMF 2011 Article IV Consultation Discussions: Preliminary Conclusions “*Comprehensive measures are required to integrate the public sector funds, increase the health insurance premium, and contain costs through re-examining insurance coverage and deductibles and reducing the rate of growth of spending on equipment, pharmaceuticals, and personnel. Furthermore, in order to contain pension pressures,*

*plans need to be implemented to increase the statutory retirement age from the current 60 years as well as reduce the rate of accrual of benefits.”*

In terms of fiscal incentives, investors to Curacao can access several incentives including:

- Tax incentives on inward capital investment
- Investment allowances in the form of deductions from taxable profit
- Accelerated depreciation
- Expatriate exemptions on income tax
- E-Zone company exemptions or reductions in profit and turnover tax rates, duty exemptions, and payment of foreign exchange licence charges
- Tax holidays and duty exemptions for new industries and hotels and land development companies.

Curacao is facing major challenges with controlling its fiscal deficit at the moment and the following quote by Amanda Banks, Tax-News.com, London, 24 July 2012 sums up the situation:

*“Curacao has been tasked by the Netherlands government with getting its fiscal house in order after it contravened a pledge made upon becoming autonomous to maintain balanced budgets.*

*Under a 'formal compliance order' from the Netherlands government, Curacao must present plans for budget savings worth some ANG153m (USD86m) by September, to ensure a fiscal balance in 2012, and make good the ANG98m budgetary deficit the territory incurred in 2011.*

*On October 10, 2010, a new constitutional relationship between the Netherlands and its Caribbean dependencies became effective, granting greater autonomy to Curacao and Saint Maarten and dissolving the Netherlands Antilles. The Netherlands agreed to write off the two territories' debts partially in exchange for an agreement that the territories' authorities would prudently manage their finances.*

*While Saint Maarten achieved a balanced budget in 2011, Curacao registered a significant deficit, partially due to weak economic performance, which is highly dependent on the contribution of financial services, but also because of the slow progress made in healthcare reform.”*

Given the tight economic situation, tense political situation, and the uncertainty facing business community, the new Government that will be formed after the upcoming General Elections will face a major challenge in fixing the budget deficit and the current account deficit while generating the necessary economic growth necessary to ease these pressures. This long term sustainable plan being carried out by TAC should play an important role in helping to address the situation.

## 7. Monetary Policy (including outlook of central bank; BoP risks)

Monetary policy in Curacao is determined by the Central Bank. Due to the fact that since 1971 Curacao has operated a fixed exchange rate with the US\$ of NAf 1.79 = US\$1, it is limited in its monetary policy instruments. A major challenge facing the Central Bank is due to the fact that Banks have excess liquidity at the moment due to the repayment of the Government's Debt by the Netherlands following the constitutional changes from which Curacao became an autonomous country within the Kingdom of the Netherlands in 2010. This situation has helped to put further pressure on the current account deficit and the desired level of foreign exchange reserves. The main instruments used by the Central Bank to tighten or ease monetary policy are:

- (a) Monetary Cash Reserve (MCR) arrangement
- (b) Reserve requirement
- (c) Policy on foreign positions
- (d) Open Market Operations

The MCR entails the application of a ceiling on credit extension to the private sector and to the government sector by banks. Credit extension in excess of the ceiling is subject to a penalty. The rationale behind the MCR is that restricting domestic credit to the private sector controls private sector expenditures and hence the imports, which will reduce balance of payments pressures. MCR has not been used much by the Central Bank since 2002. Recently, a credit measure was introduced in order to stem the growing current account deficit on the balance of payments and the declining trend in reserves. This is not popular throughout the economy because even though the policy may have the impact of reducing domestic credit for consumption activities, it also affects credit for investment which is required for stimulating real economic growth. However, financing of foreign exchange strengthening projects is eligible for exemption of the credit measure.

The Central Bank also uses the Reserve Requirement as a key instrument of monetary policy in which banks are required to deposit a fixed percentage of their domestic liabilities at the Central Bank on a non-interest bearing blocked account. The percentage is determined on a monthly basis and was 12% in August 2012, which has not been sufficient to mop up the excess liquidity in the system.

The Central Bank also uses a policy on foreign positions of commercial banks which does not allow them to have negative foreign asset positions and prevents the accumulating of net foreign debt, which might ultimately contribute to a foreign exchange crisis.

The Central Bank also initiates open-market operations through buying or selling government securities whenever monetary developments warrant such an action, especially given the excess liquidity position of the banks.

On the whole, the excess liquidity in the domestic banking system has required the Central Bank to call into play its instruments of monetary policy in order to prevent the balance of payments and foreign exchange reserves from deteriorating further in an economy with minimal economic growth.

## **8. Statistics and their availability/reliability**

With respect to this assignment, the main agencies responsible for statistics are the Central Bureau of Statistics (CBS) and the Central Bank of Curacao and St. Maarten. Over the years these agencies have attempted to collect data for the Netherland Antilles broken down by the different islands, however in some cases this disaggregation has not taken place which creates some challenges. In addition to the above two agencies, more detailed information on trade and tariffs can be obtained the Customs Department and more in depth information on Tourism can be obtained from the Curacao Tourist Board (CTB). The Central Bank, the CBS and the CTB have websites that present key data and information that the typical reader might require however if detailed time series data are required a special request to the particular agency may be necessary. For example, the CBS has provided more detailed trade data for the consultants in this assignment.

The CBS is responsible for providing social and economic data including data on size and climate, population, public health, housing, politics, education, labour, establishments and enterprises, utilities and manufacturing, foreign trade, transport and communication, money and banking, national accounts, balance of payments, public finance, prices, social affairs, and justice and security. The level of detail of information provided by the CBS depends on whether it conducts the surveys to generate the information or whether it relies on other information institutions/agencies to provide the information. As of 2011, the CBS will be responsible for collecting data only for Curacao and not the other islands of the former Netherlands Antilles.

The Central Bank provides detailed information on (i) balance of payments; (ii) international investment position; (iii) monetary and financial (including interest rates); (iv) public finance; and (v) real sector (including prices).

On the whole the data required have been available. The Consultants in some cases have had to be careful because the data in the Statistical Yearbook do not always match those on the CBS website due to the use of estimates. However, the CBS confirmed that data presented in the Statistical Yearbook are the most updated and reliable. Furthermore, for tourism data, the figures presented in the Tourism Master Plan for contribution to GDP and employment do not match those presented by the CBS.

## 9. Relationship with The Netherlands

Curacao is a separate constituent country within the Kingdom of the Netherlands. It is an economically autonomous country since October 10, 2010. The Kingdom maintains control on foreign affairs, defence, and nationality. On international economic matters, while Curacao may negotiate and conclude any trade and investment agreement with third countries, ratification remains under the competence of the Dutch Kingdom. Curacao has autonomy regarding all other domestic issues. However, as indicated above, it remains constrained in its budgetary policy, pursuant to its Agreement with the Netherlands that in exchange of full relief of the former Netherlands Antilles' debts, it would produce sound budgets and avoid undue deficits. Therefore, Curacao is obliged to adopt and implement sound policies that would rely on existing resources and limited public spending.

## 10. Infrastructure

In terms of basic infrastructure, Curacao is reasonably well equipped with:

- A telecommunications network is in place to support e-commerce, provide reliable connections for visitors staying in hotels as well as support other telecommunications requirements of residents.
- The airport has been renovated and has a long runway despite scope for improvement in terms of air side capacity which is currently inadequate for increased traffic, land side capacity which is constrained in terms of its capacity to handle increased traffic, increased baggage handling carousels and functioning machines for security checks.
- A deep and sheltered natural harbour which still has capacity. However, if Curacao is to become a regional transshipment hub additional harbour development may be required – fortunately such sites exist on the island. The location of Curaçao and the natural harbors of the country are a big advantage and should serve as a catalyst for the development of shipping, the shipping-related industries and the yachting sector. This should be an important marketing point for the international promotion of Curacao as a maritime center.
- A fairly good road infrastructure and access to all parts of the island seems quite good.
- A reliable supply of utilities (electricity and water) even though there are complaints with respect to the cost of electricity which renders Curacao less competitive when compared to neighbours such as Trinidad & Tobago.

## 11. Regulatory system

Curacao inherited most of its regulatory system from the Netherlands. Its laws and regulations are equivalent to around 80 – 90 % those of the Dutch Kingdom. Upon its independence, Curacao also took over from the existing bilateral investment treaties and agreements to which the Netherlands Antilles were part. Curacao has signed bilateral tax treaties with Aruba, the Netherlands, Norway and Jamaica and limited tax treaties with Denmark, Finland and Sweden.

The Judiciary in Curacao is also heavily inspired from the Dutch regime. Appeals of judgments of lower courts in Curacao may be brought to the Common Court of Justice of Aruba, Curaçao, Sint Maarten, and of Bonaire, Sint Eustatius. The Supreme Court of Justice in the Netherlands remains competent to rule on the legality of judgments of the Common Court of Justice.

The maintenance of the Dutch legal and judiciary system is of course a positive *acquis* for Curacao. It is of a nature to provide the legal stability and predictability required by businesses and potential investors. During the on-site visits, the consultants were able to observe the economic operators' strong reliance on the existing laws.

However, concerns were expressed that the local judiciary remains too slow to effectively settle commercial disputes. Furthermore, concerns were also expressed about the possible lack of independence of the lower courts. Although it is constitutionally provided, it is not necessarily guaranteed in practice in Curacao, thus affecting the overall trust in the judiciary to effectively implement laws and regulations. While the consultancy could not verify these statements by itself, it nevertheless stresses the importance to ensure the organisation of the most effective and independent judicial system for the country's future economic development. This matter, among other issues, is currently reviewed by Transparency International, which decided to conduct a 'National Integrity System assessment' in Curaçao. Its report was not issued at the time of drafting of this report.

## 12. General Economic regulation

While company and business laws (including the protection of intellectual property) are largely inspired from those of the Netherlands, Curacao does not have as yet a competition law, although the Council of Ministers approved in early 2013 a draft competition law and passed it on for advice to the Advisory Council and Social Economic Council. This law provides for the establishment of a competition Board. In the meantime, stakeholders interviewed indicated that unregulated anti-competitive practices seem to take place in the sectors of telecommunications, utilities, pharmaceuticals and harbour services.

It is becoming widely acknowledged that an effective competition policy greatly contributes to the efficiency and fairness of a market economy. It is also a factor of "economic" democracy, which avoids expensive rent seeking behaviors resulting from concerted practices or from monopoly abuses.

Consumers and industrial users of intermediary input are eventually the main winners of such policy, which is also an important factor of poverty reduction. During the consultants' meetings in Curacao, the Government's determination to pursue a competition policy was underlined.

Implementing a competition policy, however, is not an easy task, as it not only requires a deep understanding of national, regional and international markets in a variety of sectors, but it may also imply, occasionally, a confrontation with major enterprises that are able to exert very strong pressures. A powerful and independent body, staffed with top quality and well-paid officials is necessary to address these difficulties. Establishing it seems to be a real challenge.

Furthermore, considering the possible power struggles, the inception of a competition policy requires subtle tactics and a delicate and incremental intervention. Also, considering the variety of issues arising in the application of competition policy, likely, relevant implementing decrees, including exemption regulations, must be adopted quickly to ensure the necessary legal certainty for the market players and the gradual adjustment of their practices to the new competitive environment. This also constitutes a key challenge for Curacao.

Finally, as indicated above, like in all other fields, the appropriate training and preparedness of independent judicial authorities is a key element for the proper functioning of a legally predictable competition policy.

### **13. Social Policies**

#### ***a. Availability of educated public administration***

The consultations suggest that there are adequate numbers of educated persons in the public administration in Curacao. If the objective is to provide red carpet rather than red tape or e-Governance rather than bureaucratic governance then the public administration system would need to be rationalized. This would require retraining of persons as well as changing the leadership and orientation of critical institutions. However, there would still be the need for transparency and proper standards despite such reforms. That should entail modern legislation and policy making, inter-sectoral cooperation, bottom up approaches and no political influence on decision making on individual cases.

#### ***b. Availability of skilled labour and issuance of work permits***

There are some areas of the labour market where there are skill shortages, such as tourism, construction and knowledge workers. The education system is not geared to educate "knowledge workers".

Curaçao's labour market is generally characterized by a lack of mobility (due to lack of alternatives), relatively high labour costs and high youth unemployment. In 2011, Curacao's total employed labour force stood at 62,042 persons with an economically active population of 68,763<sup>30</sup>. The overall unemployment rate for that same year was 9.8%, with youth unemployment much higher at 24.7%, more than twice the general unemployment rate. This high youth unemployment rate is of great concern but present a great opportunity because if this can be reduced it will have the overall benefit of reducing social security costs while increasing production and the income tax base.

Despite the labour market being less rigid than it was in the 1980's (as shown in studies conducted by the IMF, World Bank and the Inter-American Development Bank), it is still thought that many employees hold onto the jobs they have due to a lack of alternatives. This inflexibility has created a strain on the different economic sectors in Curacao.

In addition to poor mobility, the cost of labour in Curacao is also considered to be fairly high compared to the relatively low levels of productivity of the labour force as well as compared to the cost of labour in many Caribbean, Latin American countries, and even Pacific countries (such as The Philippines) with which Curacao has to compete. Curacao will need to look at using technology to a) enhance productivity across all skill categories; b) to assist in the development and delivery of high quality goods and services; and c) act as a catalyst or a direct agent for creating jobs especially at the lower skills levels where unemployment is at high levels.

As reflected by the large number of foreign workers in Curacao, a notable feature of the labour market is the serious mismatch between labour demand and supply. There is a paradox in that while the rate of unemployment is 24.7% amongst youth there are numerous vacancies filled by foreigners working in Curacao e.g. in the tourism sector where in some categories local workers do not offer the same quality service as their lower cost foreign counterparts. For long term sustainable development, this situation has to be addressed with the appropriate use of training and technology.

Over 95% of enterprises in Curacao are small or medium sized enterprises (SMEs). These businesses generate over half of all jobs and support the nation's income, export, foreign exchange and investments. Curacao's employment structure shows that most domestic income is derived from tourism. Jobs in the services sector dominate the labour market (especially wholesale and retail, restaurants and hotels, financial services) which is consistent with the dominance of services in GDP.

The island's income distribution is also reflective of the characteristics of the labour market. The relatively small percentage of households that earn NAf 5,001 or more every month, predominantly have had higher education, while most households with lower education levels typically received a monthly income of less than NAf 1,000 (UNDP, 2011).

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<sup>30</sup> Curacao Bureau of Statistics



Figure 24 Distribution of equivalent monthly income in Curacao, in 2006-2008 (in %)

NAf	2006	2007	2008
>1000	35	31	39
1001-2000	28	29	28
2001-3000	15	16	15
3001-4000	8	9	8
4001-5000	6	6	4
>5001	8	9	6
	100%	100%	100%

Source: UNDP, 2011

### Brain Drain in Curacao

The issue of brain drain in Curacao's labour market is as a result of certain push factors, primarily, the search for better job opportunities elsewhere. Approximately 300-400 students go abroad annually to pursue tertiary education, few of which return to seek/gain employment in Curacao. This reflects amongst other things relatively few (perceived) opportunities for this segment of the workforce. The UNDP Report of 2011 reported that those emigrating usually choose the Netherlands, which apart from sharing the same language and legislative framework, offers higher wages, better job opportunities for the higher educated, and, if no job is found, a better social security system. Curacao has to look carefully at the skill requirements of the country and aim to steer those who go overseas to study to select subjects that will make them readily employable and at competitive rates if they return to Curacao after their studies are completed. It is recommended that even more effort should be used to provide more targeted scholarships (to study in the Region and in the Netherlands) coupled with bonding arrangements as an incentive to channel students into areas/disciplines where the demand for labour is greatest.

### Government Policies

Government policies with respect to the labour market over the years have included a number of initiatives to combat the issues facing the labour market. In the year 2000, labour laws were adjusted in order to increase flexibility within the labour market and encourage a better investment climate. Among the steps taken were:

- Enactment of the Dismissal Law which protects employees against unreasonable and arbitrary dismissal. In most cases, the employer needs the approval of the Directorate of Labour Affairs to terminate a labour contract
- Allowance of private labour mediation
- Allowance of employers to legally shift working hours between weeks in order to avoid overtime. In addition, regular working hours per day were increased (9-10 hours without

overtime) for all labour types (regular, scheduled labour and in the Hotel & Catering and Casino industry).

- The government decided to equalize the minimum wages to ANG 5.77 (per hour) for all 4 categories
- The government introduced initiatives aimed at matching the supply and demand on the labour market by organizing, through the relevant units, special crash-course programs in order to meet the rising demand in specific sectors such as tourism and e-commerce.
- The LAV-law (Landsverordening Arbeid door Vreemdelingen), which contains regulations regarding the admission of foreigners, is being examined by the Island Department of Labour, which is entrusted with the execution of the LAV.

The economy demands a well-educated labour force, which should be supplied by the educational system. Unfortunately, a serious mismatch between supply and demand currently exists. High unemployment and vacancies exist at the same time. This mismatch is caused by various factors including:

- The incapability of the educational system to deliver the required numbers and quality of professionals
- Lack of information concerning the number of personnel needed in each segment of each industry
- Lack of training capacity within the various institutions
- Deficiencies in the standards of available labour are, among other things, caused by outdated curricula, and equipment and lack of adequate in-service training of teachers.

Given the above mentioned shortages of appropriately skilled labour, investors/businesses are often forced to seek the required quality of employees from outside Curacao, however, they are often frustrated by the length of time it takes to obtain work permits. Cases were mentioned where work permits were issued long after the urgent need for staff was over.

### **c. Reforms in education and health sector**

#### **Education**

##### **Structure of Education System<sup>31</sup>**

Curacao's education system is based on the Dutch system of education. There are a number of public and private schools to facilitate the educational needs of the population as well as residents and students from other regions. Instruction from kindergarten through primary, secondary and tertiary level is in Dutch and Papiamentu. Private schools mostly use English or Dutch.

Curaçao, unlike many other countries has three forms of secondary education. Students are allowed to choose between any of the three forms, depending on their interests. These are: the VSBO, the HAVO and the VWO.

1. VSBO schools provide intermediate and lower vocational education. The VSBO certificate gives access to secondary vocational education (SBO).
2. The HAVO certificate is awarded on completion of a five-year course of general secondary education, including the transition year. The certificate gives access to higher professional education ("HBO" / undergraduate).
3. The VWO certificate is awarded after six years of pre-university education, including the transition year. The VWO certificate gives access to universities as well as HBO.

One of the key deficiencies of Curacao's education system is that it delivers relatively few professionals who are sufficiently skilled to enter the labour market. As mentioned before, the apparent mismatch between supply and demand at present results in unemployment and vacancies existing simultaneously. This mismatch is caused by various factors; primary amongst them is the incapability of the educational system to deliver the required numbers and quality of professionals<sup>32</sup>.

Data from 2009 showed that 8% of the Curacao's workforce had elementary education; 67.6% finished secondary education; and 24% higher education. There is a high level of secondary education drop outs so Curaçao provides the Youth Development Program in which unqualified drop outs participate 'with the aim to get at least some job qualification skills' (UNDP, 2011).

Despite the various challenges however, the general level of education in Curacao has been gradually increasing over the years, attributed to the policy of the government to create a knowledge driven economy through increasing tertiary education students, and improving technical skills among the population.

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<sup>31</sup> Multi-Year Economic Plan, Part II, Island Department of Economic Affairs (DEZ) Curaçao, June 2004  
<http://www.curacao.gov.an/extranet/government.nsf/0/aa64f7e8538a049904256b6d0040a407/Body/M5/MEP%20Part%20II%202004%20-%202007.pdf!OpenElement>  
<http://www.curinvest.com/about-curacao/education>

<sup>32</sup> Multi-Year Economic Plan, Part II, Island Department of Economic Affairs (DEZ) Curaçao, June 2004

## Government Policy on Education

Over the years, successive governments in Curacao have made education a priority sector for the general development of the country. Commissioned by the central government's Ministry of Education, the primary goals of the reform of the educational system have been to increase the level of education of the labour force and to improve the functioning of the labour market by matching supply and demand. Steps to achieve such have included: constantly investing in new curricula, promoting basic education, supporting and disseminating innovative practice through global partnerships, improving infrastructure facilities and fostering greater dialogue with the private sector to keep the educational system focused on the needs of the labour market. In addition, several stakeholders and other entities have committed to a collaborative effort to ensure that educational development is assured. Among these collaborators are:

- **Island Departments:** The Ministry of Education, Science, Culture and Sports (ESCS) is responsible for educational policies, including vocational training policies. The Department of Education and Science, which is the executing Department of the Ministry of ESCS, has the task of managing educational innovations for the public schools as well as other general responsibility for innovations in all schools. The ESCS has delegated to the Foundation for Innovation in Education (FIdE) the responsibility for preparing and implementing a significant part of educational reform. This Foundation also has the task of advising the Ministry of ESCS on the policies for Educational Innovations.
- **School administrations:** The Department of Education and Science is in charge of the school administration. This department funds and controls the seven different school boards on the island. There are several school boards which have under their jurisdiction schools for vocational training. The school boards with the most schools for vocational training are the "R.K. Centraal Schoolbestuur" (RKCS) (Roman Catholic School Board) and "Dienst Openbare Scholen" (DOS) (Public School Board).
- **Feffik:** Feffik is a foundation responsible for a more practical learning program on vocational education.
- **Tourism sector [CTB]:** The Curaçao Tourism Bureau (CTB) conducts, among other things, surveys to determine the need for personnel in hospitality services and makes forecasts of hotel construction and the required number of new hotel rooms.
- **ICT sector [CICA]:** The Curaçao Information & Communication Association (CICA) is the business association of ICT service providers.
- **CISP/Stimul-IT Curacao innovation & technology institute:** The foundation CISP and the executing bureau Stimul-IT coordinate all promotional activities of the ICT sector on behalf of the government.

- Tourism Human Resource Development Board: Consulting platform for government and private sector on labour market issues within the hospitality industry.

The most recent step taken by the government towards educational development was the decision to establish a Trainee Bureau to increase the number of trainee posts in crucial sectors so that more students can gain practical experience.

Other initiatives to stimulate entrepreneurship and innovation include:

- Competition among elementary schools, organized by a private bank, to stimulate entrepreneurship among students from a very young age. The program is annual and takes place every year between May and November. Unfortunately, there seems to be no continuation of the process during the rest of the year. It is recommended that the Government should encourage more initiatives like this because not only would they inculcate entrepreneurial thinking in the minds of students at a young age but also generate greater direct involvement of the private sector. This confluence of factors can only help to stimulate entrepreneurship and innovation.
- Fundashon Negoshi Pikiña/Junior Achievement Curaçao (foundation). The goal of this initiative is to develop an entrepreneurial and pro-active community starting with the youngest generations. The foundation has developed a program to be used at the vocational schools to stimulate, guide and prepare students to become entrepreneurs. This is also a short term program lasting 12 months in which students learn all the steps necessary for starting up a business (developing business plans, opening bank accounts, finding shareholders, etc.) and operations (production, marketing, accounting and personnel relations). Students can continue the business, if they wish, after the 12-month period but will need to subscribe at the Chamber of Commerce and fall under regular laws and regulations such as taxation etc.

## Health Care

With respect to the healthcare sector, the consultations provided information that suggested that certain reforms ought to be considered<sup>33</sup>. It was felt that Curacao should aim to have an Integrated Health Policy oriented towards preventative health care and a better coordinated health care system. It was explained that there is scope for greater organisation in the sector which has many players who are not organised or harmonised. In light of the fact that the demographics of the country suggest that there will be increased pressure on the healthcare system, it was felt that greater leadership was required in the sector.

It was noted that plans had been put forward to reform the system but they had not been implemented. Some of the reforms put forward in the consultations included:

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<sup>33</sup> As with the Education Sector, the Consultants consider that further consultations will be required to obtain a broader set of perspectives

- Having one full service hospital with satellites
- Having specialists fully integrated into the health system rather than in their own practices
- Rationalising the number of laboratories and pharmacies in the country as there are too many
- Restructuring the way in which medication is purchased, such as using more generic drugs, given the excessive cost of the current system.
- Developing and executing a National Health Awareness campaign that communicates to persons on issues such as diet and preventative healthcare matters

On the whole it was felt that the country is well endowed with medical professionals in all departments except for neurologists (and even this shortage of neurologists is being addressed by efforts to induce a couple of local neurologists operating in Holland to return.) However, it was felt that there was scope to improve the level of training for nurses.

#### ***d. Labour market flexibility***

During consultations, the usual labour market inflexibilities were discussed including:

- Dismissal laws that protect the employee and take a long time for employers to be able to dismiss employees – the business community complained about the dysfunctional nature of this law which required, in some cases, the authorization of the Director of Labour Affairs.
- The mix of labour supplied by the training institutions does not match well the composition of skills required by employers – the result is that employers in many cases cannot find the skills and competency they require in the domestic labour market. On a macro-level this tendency manifests itself in chronic labour market disequilibrium where unemployment and vacancies coexist.

Table 1 Employed Population, vacancy rate by Economic activity

Economic Activity	2006				1998			
	Employed Pop	Vacancy	%	Vacancy rate	Employed Pop	Vacancy	%	Vacancy rate
Agri/Fishery/Mining	799	19	2	2.4	361	16	2	4.4
Manufacturing	3,330	60	6	1.8	4,357	107	12	2.5
Electric/Gas/Water	802	5	1	0.6	892	15	2	1.7
Construction	4,335	74	8	1.7	2,613	36	4	1.4
Wholesale/Retail	9,971	137	14	1.4	10,004	150	17	1.5
Hotels/Rest	4,297	139	15	3.2	4,164	82	9	2.0
Transport Storage	2,330	37	4	1.6	3,181	39	4	1.2
Financial intermediation	4,544	93	10	2.0	4,194	93	10	2.2
Real estate renting	5,309	157	17	3.0	4,905	132	15	2.7
Education	758	10	1	1.3	448	8	1	1.8
Health/Social work	4,473	112	12	2.5	3,544	73	8	2.1
Other community	3,460	107	11	3.1	3,433	138	16	4.0
Total	44,408	950	100	2.1	42,096	889	100	2.1

Source: CBS

The above table shows that in 2006 and before that in 1998, vacancies existed to some extent in all economic sectors<sup>34</sup>. At the same time the CBS data reveals that there is 25% unemployment amongst the youth. This reflects the fact that there is a tendency towards a mismatch in supply and demand for labour given that the vacancy situation existed over the 1998 to 2006 period. The mismatch seemed to affect some industries more than others, for example tourism and information based industries seemed to be more affected than others. In addition, for some industries, such as International/ Offshore Financial Services, the deficiency tended to be in high level specialized skills. However, in tourism the shortage of skills included front line staff such as bar tenders.

In light of the above situation where some industries are facing a deficiency in certain skills, the proposed 80/20 labour law which has been approved, is of great concern to many employers because the implication is that if they recruit from overseas one person with a specialized skill that cannot be found domestically then they will be required to hire four local workers. CIFA is somewhat concerned about this labour law due to the shortage of professionals for some specific positions on the island.

<sup>34</sup> The CBS which is responsible for conducting the labour market survey has not conducted such a survey since 2006, they are expecting to provide the latest set of data based on the 2011 Census.

There is a division of opinions on the 80/20 labour law with those groups or individuals supporting the cause of local labour supporting the 80/20 labour law while those in business typically not in favour. During the consultations, representatives from the domestic financial services industry suggested that the 80/20 labour law did not affect them because they met their labour requirements from the domestic market, a similar situation was also identified for the nursing profession.

Another labour market inflexibility mentioned by several businesses is the challenge faced when applying for a work permit in order to hire an overseas person. There were complaints that the process is very bureaucratic and slow and often times the business opportunity was lost or the person was no longer available by the time approval was obtained. Those who find themselves in this position complain that it affects the productivity of their business and require reforms that will address this issue.

For some businesses they find themselves in a position with a potential double blow given that they may have no choice but to face the bureaucratic process of securing work permits for those recruited as well as then encountering the (potential) challenges of the 80/20 labour law.

A further concern about the labour market is the impact of social security payments especially on the unemployed youth. It is argued by many and supported by the principles of economics that if people are supported when they are unemployed then they will be less motivated to seek employment and/or do what is necessary to become employable. This is not a challenge faced only by Curacao but faced by most countries that provide such a social safety net. It will be worthwhile studying the approach and changes to the approach used in the U.K. (and other countries) to address such issues.

The above discussion has outlined the need for reforms in Curacao's labour laws, the process will require deeper research to determine how binding are the constraints; when possible exemptions can be made; where the speed of certain processes can be increased; and the which best practices applied in other countries can be benchmarked.

## **14. International Trade Policies and Export Promotion**

### ***a. General Orientation of Trade Policy and Tariff Structure***

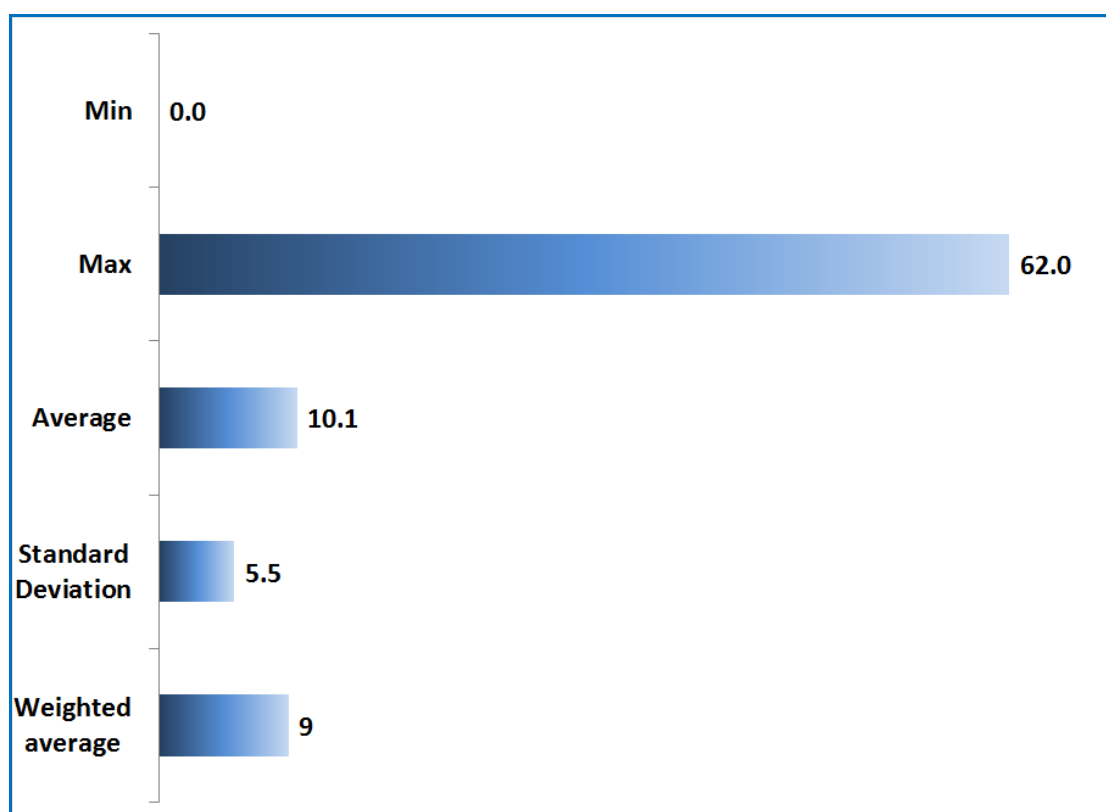
Curacao has an open economy with a strong dependence on imports to satisfy domestic demand. Trade represented 144% of GDP in 2010, with imports of goods and services representing 88% of GDP. In light of its dependence on imports and due to the fact that it has so little manufacturing operations domestically. Curacao has been through a process of transformation in its trade regime over the last decade. The first phase concentrated on tackling inefficiencies in the domestic market by targeting the elimination monopolistic situations and excessive quantitative restrictions. A second phase focused on eliminating tariff peaks and streamlining the number of tariff bands, and phasing out import surcharges.



The great majority of products are subject to ad valorem tariffs which are levied on the value at importation according to the declared c.i.f. value of the merchandise. The customs authority also levies a sales tax of 6% upon importation, unless goods are exonerated. Exoneration may occur if the merchandise will be re-exported. In some cases, the customs authority also levies specific duties on importation, or a combination of both specific and ad-valorem rates. There are just over 50 specific tariffs in the customs schedule, which relate primarily to live animals, some foodstuff, beverages and microfilms.

An analysis of the tariff data suggests that the tariff rates are relatively dispersed and uneven across the range of product groups. The average unweighted tariff rate is 10.1% with a standard deviation of 5.5% (see Figure 25). The lowest tariff is at 0% while the highest is at 62% (for smoking tobacco). There are 21 tariff peaks (defined as 3 times the average national tariff rate)<sup>35</sup>. The weighted average tariff is lower, at 9%. Overall this compares relatively favourably to other CARICOM Member States. Antigua and Barbuda for example have an average applied tariff rate slightly below that of Curacao (9.8%), but with a greater number of lines having a tariff peak. On the other hand, the tariffs exceed significantly those applied by Mauritius, Hong Kong or Singapore. Mauritius in particular, applies an average tariff rate of 1.4% only and has less than 2% of its tariff lines above 15%.

Figure 25 Tariff analysis for Curacao

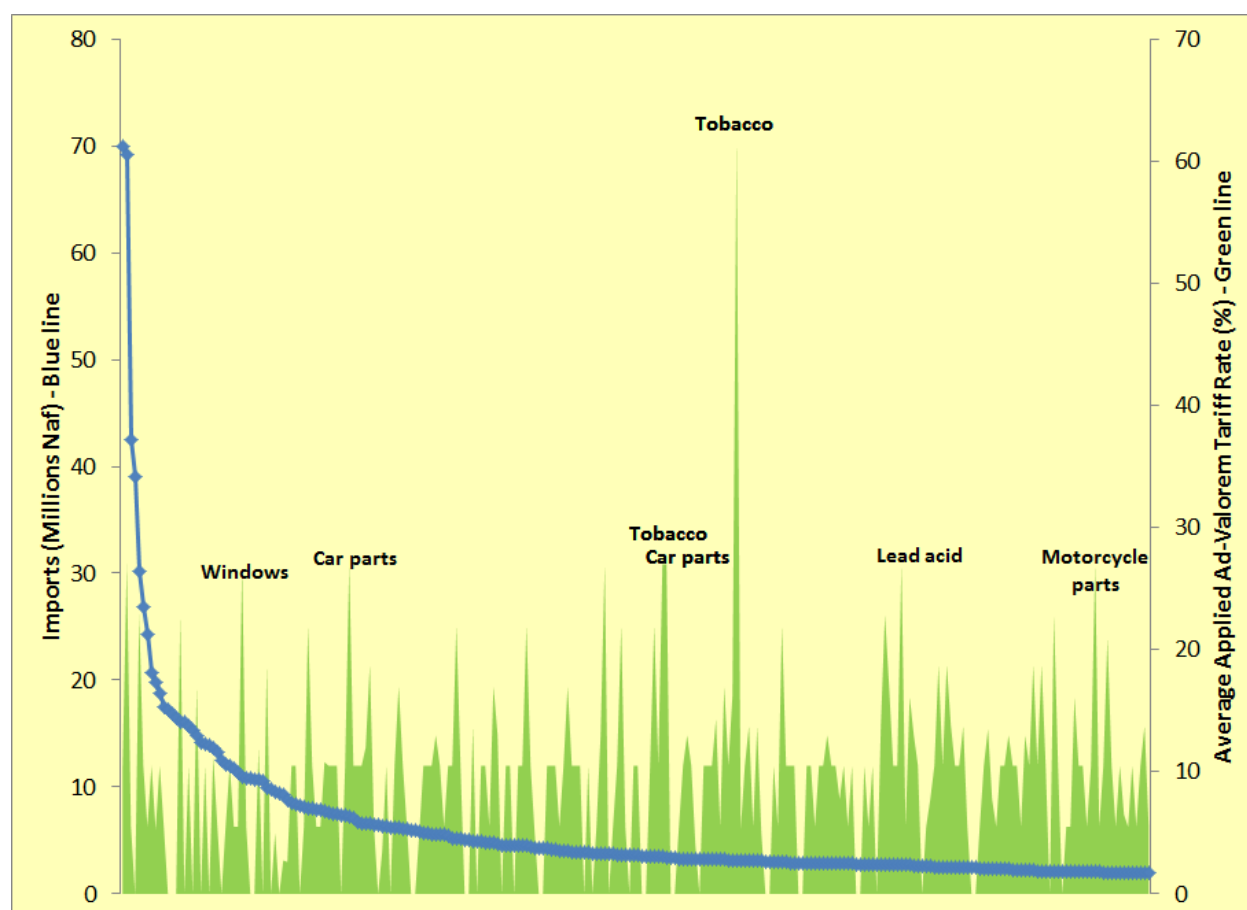


Source: Author calculations based on customs and CBS Statistics

<sup>35</sup> The specific tariffs have not been converted into ad valorem equivalents and have not been included in the tariff analysis.

Figure 26 illustrates the tariffs faced for the 250 highest imported products in 2010. The 250 highest imported products at HS6 digit level account for over two thirds of imports. There are a number of tariff peaks and these seemed aimed tackle two policy concerns: health and revenue generation. The peaks and troughs of the tariff rates would indicate that further streamlining of tariffs could be made in order to facilitate trade and employ tariffs for industrial policy objectives as well as other government policy objectives.

Figure 26 Tariffs on 250 largest imported products in Curacao in 2010



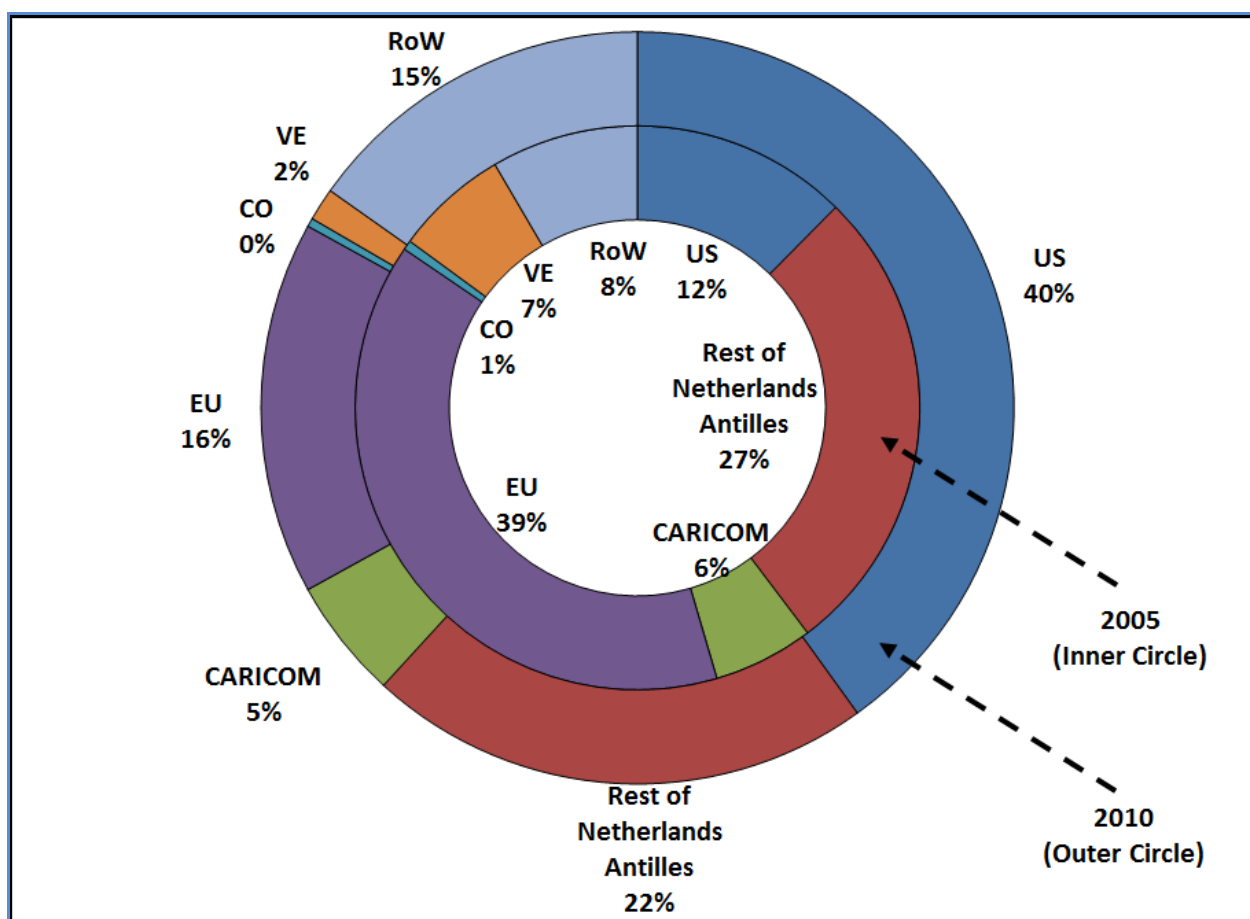
Source: Author calculations based on customs and CBS statistics

#### **b. Import and export markets**

Exports of goods and services represented 55% of GDP in 2010 (down from 70% two years earlier). Exports of goods alone account for less than 5% of GDP, which is explained by the fact that value added and transformation which takes place on manufactured goods is very limited. As stated earlier, the balance of payments situation in Curacao has become tenuous at best in recent years and trade should be considered as a potential engine for relieving pressures on reserves, but also for creating jobs and improving social conditions in Curacao. Due to the very small domestic market, the international market is a natural target for small island nations to market their goods and services. Curacao is successful in exporting its services but less successful in exporting goods.

The principal markets of export have evolved, although the series are erratic from year to year, suggesting rather opportunistic, as opposed to strategic international marketing policies from exporters. Figure 27 provides the shares of major markets to which Curacao exports, with the inner circle representing the shares in 2005, while the outer circle represents shares in 2010. Whereas the US was a small market for exports in 2005, it now absorbs 40% of Curacao's exports. As mentioned earlier, the shares are influenced by large single transactions, in this case, regarding the sale of aircraft parts to an American airline. The EU, primarily The Netherlands, saw its share in Curacao's exports fall from 39% in 2005 to 16% 2010. The other islands of the Netherlands Antilles, in particular St Maarten, Bonaire and Aruba, account for a significant proportion of exports (around one quarter). Finally, CARICOM remains a very minor destination for Curacao's exports accounting for just 5% of its exports in 2010.

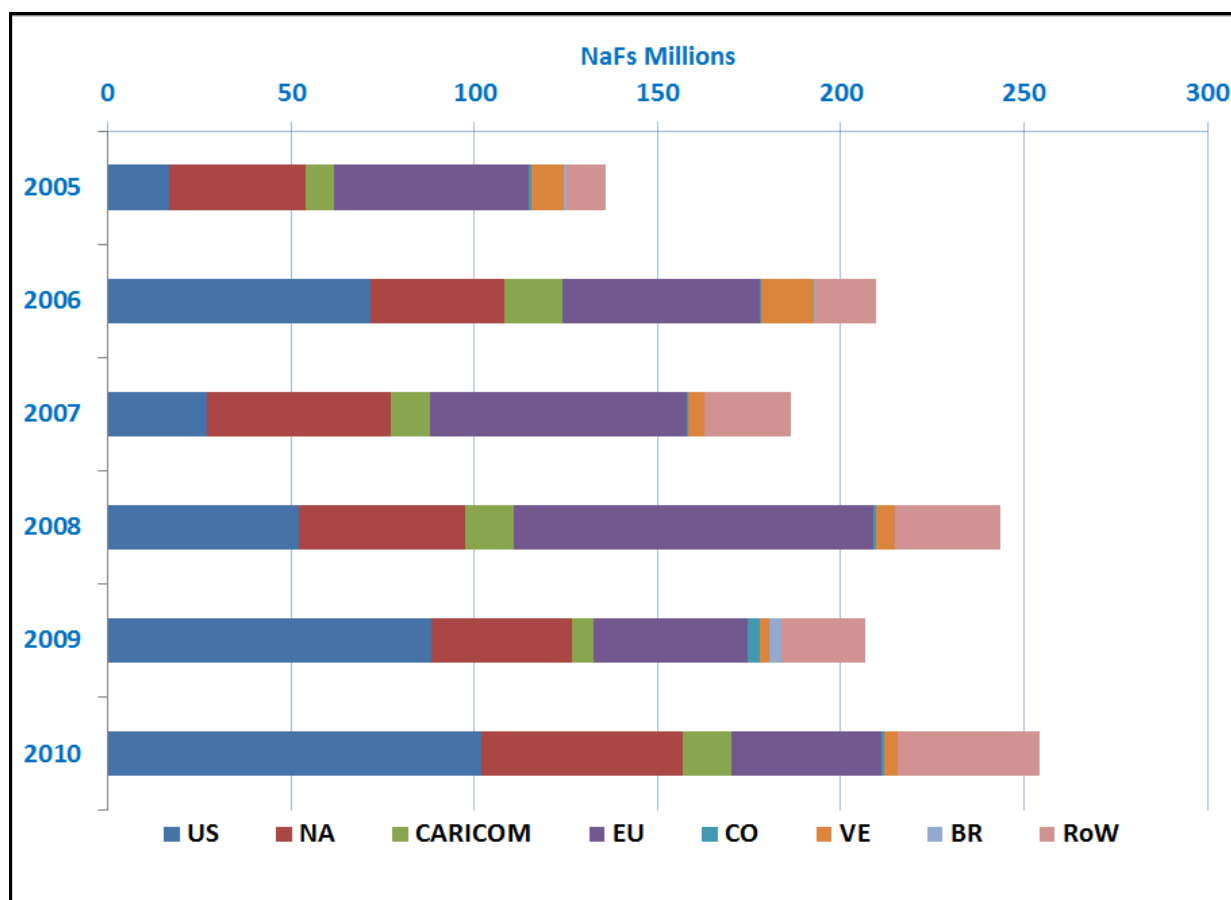
Figure 27 Exports by main markets, 2005 and 2010



Source: Authors calculations based on CBS Statistics; Data reclassified by authors on HS rev2. 6 digits

The evolution of trade with partners is illustrated in Figure 28. It is interesting to note the large surge in exports over the selected period, when exports increased by 87%. Neighbouring and Latin American countries, Venezuela and Colombia are relatively minor markets, as is Brazil. It should be noted that a small proportion of the trade relates also to exports through consumption by cruise ship passengers of local products which are subject to customs control upon departure.

Figure 28 Exports by destination, 2005-10



Source: Authors calculations based on CBS Statistics; Data reclassified by authors on HS rev2. 6 digits

Note: NA: Netherland Antilles; CO: Colombia; VE: Venezuela; BR: Brazil; RoW: Rest of the World

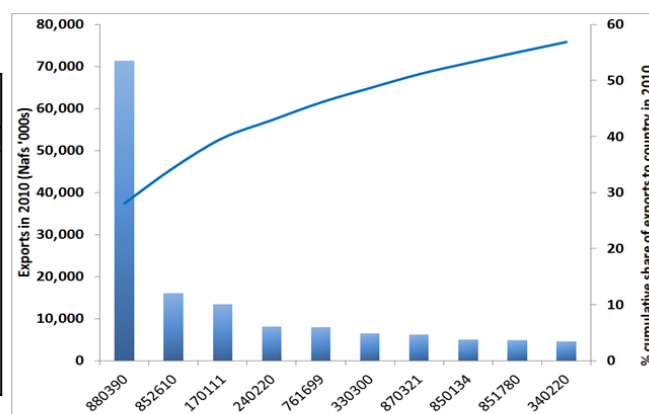
The data provided in Table 2, relates to the principal markets for Curacao's exports in 2010. It indicates the relative concentration of exports for each market, or expressed differently, the limited number of products which account for the bulk of its export revenue. A well-diversified portfolio of exports enables countries to mitigate external risks and lower vulnerabilities associated with changes in demand. The portfolio of curacao is very concentrated both on markets and in products. The US, The Netherlands and Netherlands Antilles account for over three quarters of its exports.

Meanwhile, in most of these markets, the top ten products account for three quarters or more of its exports to that market. The graphs plot the values of imports for the top ten exported products and the line graph plots the cumulative share of those products in total exports to a given market. In the US market for example, the top ten products exported account for 90% of total export revenue from the US. The top ten products exported to the EU amount to around three quarters of total exports. Exports to other markets are more diversified, such as those to the Netherlands Antilles.

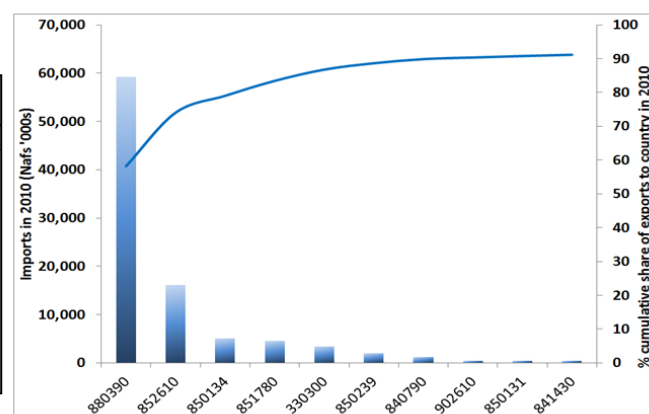
Table 2 Direction and Concentration of Exports from Curacao

**Exports from Curacao to the World**  
(Top ten exported products are listed)

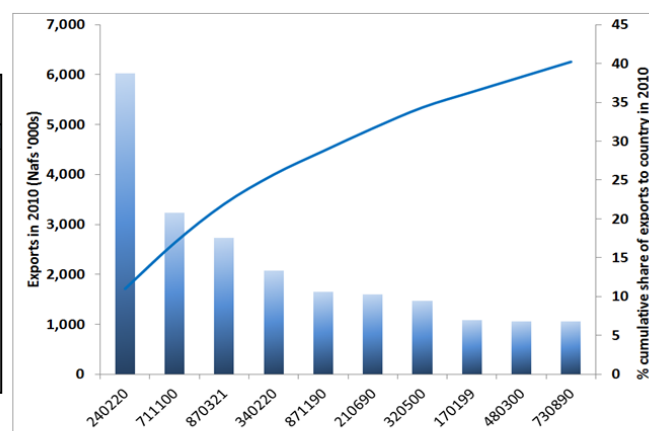
HS Code	HS 2002 Product Description	('000s Naf)	Cumulative (%)
<b>Total Exports</b>		<b>254,067</b>	
880390	Other parts of aircrafts	71,375	28
852610	Radar apparatus	16,119	34
170111	Cane sugar	13,431	40
240220	Cigarettes	8,119	43
761699	Other articles of aluminium	8,020	46
330300	Perfumes	6,523	49
870321	Motor cars (< 1,000 cc)	6,292	51
850134	Electric motors/generators (Output> 375 kW)	5,082	53
851780	Other apparatus	4,830	55
340220	Surface active preparations	4,676	57

**Exports from Curacao to the US in 2010**  
(Top ten exported products are listed)

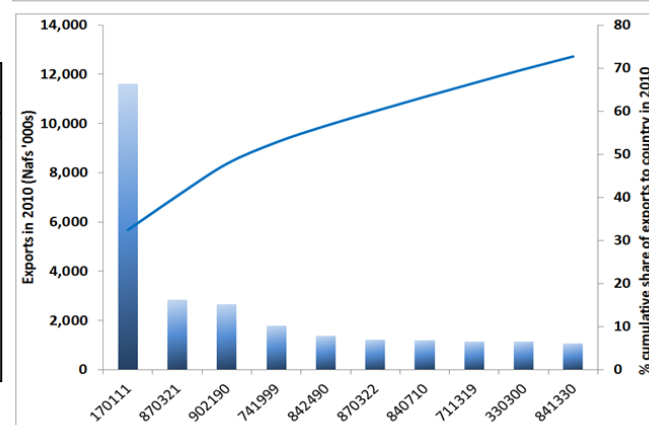
HS Code	HS 2002 Product Description	('000s Naf)	Cumulative (%)
<b>Total Exports</b>		<b>101,812</b>	
880390	Other parts of aircrafts	59,261	58
852610	Radar apparatus	16,118	74
850134	Electric motors/generators (Output> 375 kW)	5,082	79
851780	Other line telephony apparatus	4,490	83
330300	Perfumes and toilet waters.	3,394	87
850239	Other	1,920	89
840790	Other engines	1,229	90
902610	For measuring or checking the flow or level of	486	90
850131	Of an output not exceeding 750 W	442	91
841430	Compressors of a kind used in refrigerating ei	391	91

**Exports from Curacao to other Netherlands Antilles in 2010**  
(Top ten exported products are listed)

HS Code	HS 2002 Product Description	('000s Naf)	Cumulative (%)
<b>Total Exports</b>		<b>54,663</b>	
240220	Cigarettes containing tobacco	6,018	11
711100	Base metals, silver or gold, clad with platinum,	3,233	17
870321	Motor cars (< 1,000 cc)	2,730	22
340220	Surface active preparations put up for retail sa	2,072	26
871190	Other motorcycles	1,652	29
210690	Other food preparations	1,600	32
320500	Colour lakes; preparations as specified in Not	1,466	34
170199	Other cane or beet sugar	1,090	36
480300	Toilet or facial tissue stock, towel or napkin st	1,063	38
730890	Other structures of iron and steel	1,062	40

**Exports from Curacao to EU in 2010**  
(Top ten exported products are listed)

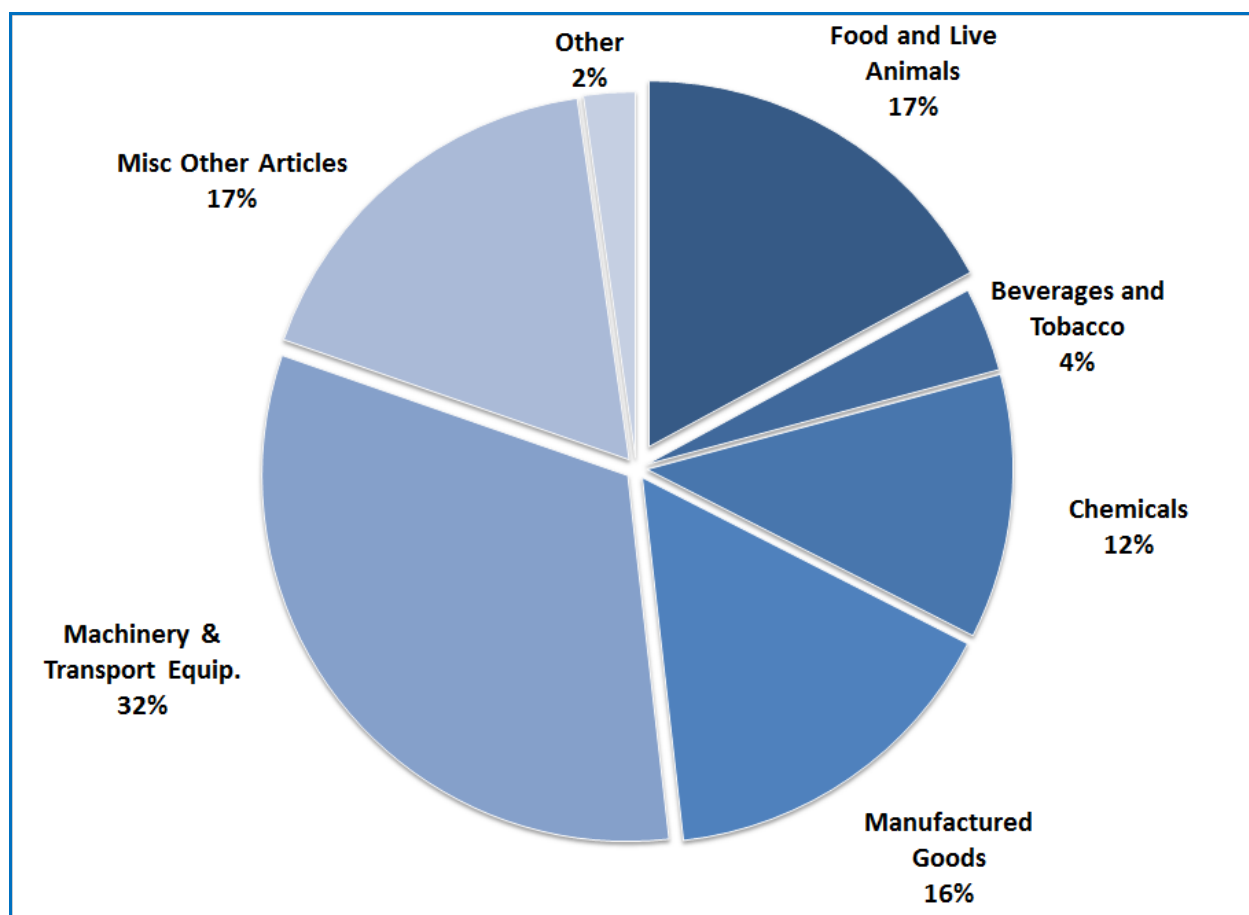
HS Code	HS 2002 Product Description	('000s Naf)	Cumulative (%)
<b>Total Exports</b>		<b>35,781</b>	
170111	Cane sugar	11,606	32
870321	Motor cars (< 1,000 cc)	2,835	40
902190	Other orthopedic appliances	2,663	48
741999	Other articles of copper	1,781	53
842490	Parts of spray appliances	1,370	57
870322	Motor cars (< 1,000 cc)	1,222	60
840710	Aircraft engines	1,183	63
711319	Of other precious metal, whether or not plated	1,148	67
330300	Perfumes and toilet waters.	1,134	70
841330	Fuel, lubricating or cooling medium pumps for	1,068	73



Source: Author calculations based on CBS Statistics

Imports are dominated by capital goods, which account for close to two thirds of imports. Food and beverages account for a further one fifth of imports. The composition of imports is given in Figure 29. The structure of imports is typical of a small island state. A large proportion of imports are also devoted to the tourism industry (including construction and machinery and equipment related to this), which is expected to raise revenues for future generations.

Figure 29 Imports by major product classification, 2009



Source: CBS Statistics

### c. Export Promotion Programmes (e-zones and industrial parks)

Owing to the very high costs associated with manufacturing in Curacao, export activities are primarily concentrated in Curacao's e-zones. The World Customs Organization (WCO) defines e-zones as being "part of the territory of a Contracting Party where any goods introduced are generally regarded, insofar as import duties and taxes are concerned, as being outside the Customs territory and not subject to the usual Customs control" and provides guidelines as to the standards and procedures to be met in order to operate e-zones<sup>36</sup>. A number of different types of freezones exist worldwide and these are summarised in Table 3. Curacao's manufacturing e-zones are managed by the Government

<sup>36</sup> WCO (1999) International Convention on the Harmonization and Simplification of Custom, Revised Kyoto Convention, Annex D

owned agency Curinde N.V. and resemble most closely those of a free trade zone or commercial free zone. The zones form part of Curacao's vision for a logistical trade hub.

Table 3 Types of freezones

Type of Zone	Development Objective	Physical Configuration	Typical Location	Eligible Activities	Markets	Examples
Free Trade Zone (Commercial Free Zone)	Support trade	Size < 50 hectares	Ports of entry	Entrepôt and trade-related activities	Domestic, re-export	Colon Free Zone, Panama
Traditional EPZ	Export manufacturing	Size < 100 hectares; total area is designated as an EPZ	None	Manufacturing, other processing	Mostly export	Karachi EPZ, Pakistan
Hybrid EPZ	Export manufacturing	Size < 100 hectares; only part of the area is designated as an EPZ	None	Manufacturing, other processing	Export and domestic market	Lat Krabang Industrial Estate, Thailand
Freeport	Integrated development	Size > 100 km <sup>2</sup>	None	Multi-use	Domestic, internal and export markets	Aqaba Special Economic Zone, Jordan
Enterprise Zone, Empowerment, Urban Free Zones	Urban revitalization	Size < 50 hectares	Distressed urban or rural areas	Multi-use	Domestic	Empowerment Zone, Chicago
Single Factory EPZ	Export manufacturing	Designation for individual enterprises	Countrywide	Manufacturing, other processing	Export market	Mauritius Mexico Madagascar

Source: FIAS (2008) Special Economic Zones, Performance, lessons learned, and implications for zone development, World Bank Group

The Industrial parks, such as Brievengat, have not been very successful in channeling investment into manufacturing operations, so that the airport and seaport e-zones remain the primary location for export activities. A lot of the activities relate to retail and the carry trade. Businesses in the Airport e-zone are primarily focused on high value products such as precious stones and gold, pharmaceuticals, computers and specialised optical or computer equipment. It was hoped that the business park (Brievengat) would attract investment into production aimed at the North American market under the preferences granted by the US to Curacao (the CBI initiative) or in the EU market, so as take advantage of the OAD, although these have not materialised.

In Curacao, the e-zone offer a number of advantages such as the zero import duties and the 2% profit tax. The conditions for taking advantage of the e-zones and the benefits which can be derived from it are summarised in Table 4. It should be noted that a maximum of 25% of free zone goods can be sold to the local market, after the obtaining of a special permit, and that these goods these attract duties. Outside of these e-zones, there are e-zone parks across the islands which focus on trade in services provided through electronic means, such as IT services, internet gambling sites, software development



and call centre activities. It is estimated that around 400 persons are employed, primarily in businesses related to IT and call centres<sup>37</sup>.

Table 4 Requirements and advantages from the Curacao Free Zones

Airport and Harbour Freezone
<p><b>Requirements</b></p> <ul style="list-style-type: none"> <li>• A minimum of 75% of the annual turnover must be obtained from export. Sales to the Curaçao market are allowed up to a maximum of 25% of the total sales turnover if a permit is obtained<sup>38</sup>. On these sales normal import duties and profit tax rates are applicable;</li> <li>• A minimum of one job created per 1800 square feet (170 square meters) of space occupied;</li> <li>• Establishment of a limited liability company under the Curaçao law, dedicated exclusively to the Curacao free zone business;</li> <li>• Local business/director's license;</li> <li>• Local work/residence permit;</li> <li>• For a long lease land contract, a feasibility study is required.</li> </ul> <p><b>Incentives</b></p> <ul style="list-style-type: none"> <li>• 0% import duties;</li> <li>• 2% profit tax on export profits;</li> <li>• No land and property taxes;</li> <li>• Exemption of turnover tax.</li> </ul>

Source: CURINDE

Through consultations held with the business community a number of challenges appear to have emerged in recent years for those operating in the freezone. These include the loss of Curacao's national carrier ALM which meant that Curacao lost many of its Jamaican and Haitian customers<sup>39</sup>; the temporary closure of the Free Zone at one stage because of fires; the increased Dutch government immigration regulations which forced people to go to Panama instead of Curacao; occasional uncertainties regarding customs practices; red tape and high utility costs and uncompetitive lending terms by the Banks in Curacao. With the increased competition from Panama, the relatively low volumes of business in Curacao, the difficulties linked to expanding on space in the airport e-zone, the lack of adequately trained workers and the uncertainties associated with air transport, it was felt that growth in the e-zones are likely to be limited in the field of manufacturing and assembly. It might a higher potential with respect to services on the condition that qualified labour can be mobilised and accessibility on travel routes is high, and overheads can be kept low.

37 Government of Curacao (2011) Curacao Economic Outlook 2011

38 In practice, firms export 100% of production. New law requires 100% to be exported.

39 Since meeting with stakeholders, the DAE carrier and another carrier Inselair are operating across a wide network of destinations



## 15. Technical regulations, standards and sanitary and phytosanitary rules

A number of rules and standards must be met when exporting to Curacao, although these are not considered to be protectionist in nature. Some agricultural products must be registered before import. The Inspectorate of Public Health, which is part of the Ministry of Health is responsible for controlling standards related to pharmaceuticals, pesticides and narcotics. Standards are primarily linked to European Standards. The veterinary service is responsible for the verification of importation of live animals, meat and meat products. Meat and meat products must originate from abattoirs which have been approved by The Netherlands or Curacao.

Import registration is required for certain essential products such as rice, tea, coffee, baby food, powdered and evaporated milk, vegetable oils, margarine, certain vegetables, sugar, meat and fish, alcoholic beverages, cigarettes, peanut butter, chicken, chicken's eggs, pharmaceuticals, cement, automobiles, corn-meal, animal feeds. For animal feed, a special license is required when importing from South America<sup>40</sup>.

With regard to exports to the EU, the regulatory framework stipulates that food imports from third countries need to comply with EC regulation and that traceability shall be established for all stages of production. According to EU regulations, food producers bear primary responsibility for the safety of food through the use of a hazard analysis and critical control points (HACCP) system. Certain food establishments need to be registered or approved by the competent authorities, which can verify compliance with food laws in general and with food hygiene in particular. This demands that Curacao puts in place the necessary infrastructures and capacity to comply with these requirements. Food safety legislation shifts part of the responsibility for controlling food safety to the authorities of the exporting country as a condition of entry into developed-country markets<sup>41</sup>. A study<sup>42</sup> revealed that huge challenges remain for OCTs to upgrade their standards and to improve their regulatory and control framework.

Compliance with standards and the wider use of good agricultural practices (GAP), however, can bring both commercial benefits and sustainable development benefits. While food safety regulations may represent an obstacle to access the EC (and other third) market, other instruments like geographical indications and a policy geared towards an enhancement of local production having unique biodiversity characteristics may develop success stories. There may nevertheless be a need to

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40 Placide, L. (2010), *ibid*. It should be noted that the lack of an SPS legislation in Curacao, which would be directly relevant to the island's conditions, is a problem for it to determine the risks of pest and other contaminations coming from abroad.

41 See Luff, D., P. Baker & Balestieri, E. (2010) The Analysis of the Regional Economic Integration Processes (Caribbean, Indian and Pacific Ocean) and Recommendations aiming at enhancing trade and economic activity of OCTs within their region and with the EC, DFC, Final Report

42 See Green paper on Future relations between the EU and the Overseas Countries and Territories Brussels, 5.6.2008 COM(2008) 383 final Commission staff working document accompanying the Green Paper Future relations between the EU and the Overseas Countries and Territories (COM(2008) 383 final, 25.6.2008 SEC(2008) 2067

explore alternative market outlets for small-scale growers that cannot be integrated into high-value supply chains. The CARIFORUM EPA has a number capacity building initiatives aimed at building GIs and this has already been successfully implemented by Jamaica for example.

With regard to the US market, with the exception of very few products, all fresh and fruits vegetables can only be imported if they are included in such country/products lists compiled by the US Department of Agriculture<sup>43</sup>. In terms of SPS requirements the main market access issue is related to the how difficult and time consuming the process is to have a product and a country placed on the approved list. A study carried out for the World Bank argues that although the permit application process is simple and straightforward, achieving initial admissibility for a new product from a foreign country can be extremely time-consuming and sometimes costly<sup>44</sup>.

## 16. Services and Investment Policies

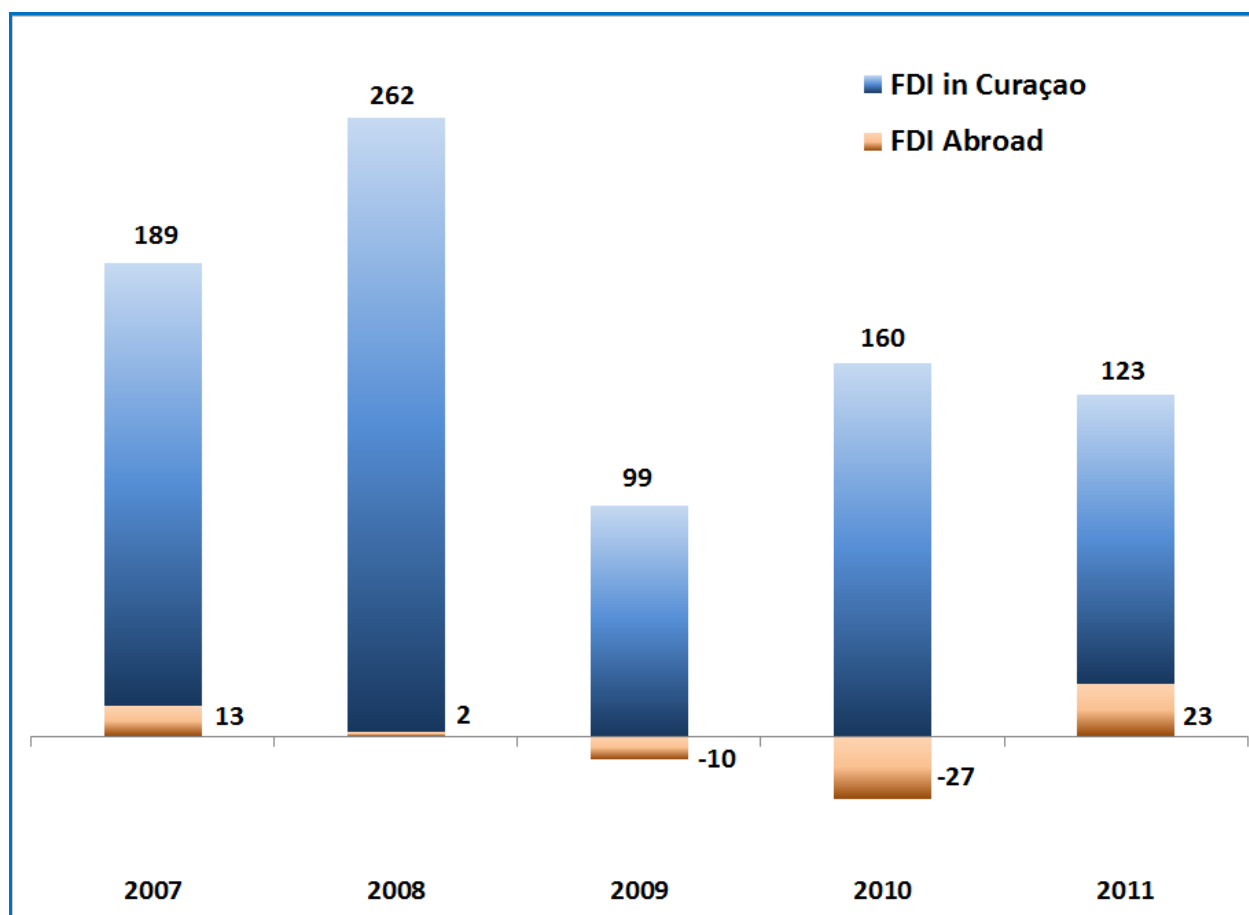
The most recent statistics on foreign investment seem to indicate a slowing down of FDI in Curacao, falling from US\$ 190 million to US\$ 123 million in 2011 (see Figure 30) While equity capital investments in Curacao have remained steady, other types of capital investments have been less stable (Figure 31). It is interesting to note that the sectoral distribution of FDI is heavily biased towards three economic sectors, notably financial services, which account for nearly 60% of all FDI, with the amount invested offshore and onshore approximately equally distributed. Retail and wholesale sectors also receive a large proportion of FDI, accounting for 29% of total FDI inflows (see Figure 32).

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43 See for this section and an overview of main policy on SPS in major markets: Food Safety and Environmental Requirements in Export Markets - Friend or Foe? UNCTAD 2007.

44 Lamb JE, Velez JA and Barclay W (2005). *The challenge of compliance with SPS and other standards associated with the export of shrimp and selected fresh produce items to the United States market*, Agriculture and Rural Development Discussion Paper, Washington, DC, World Bank; accessible at: [www.worldbank.org/trade/standards](http://www.worldbank.org/trade/standards).

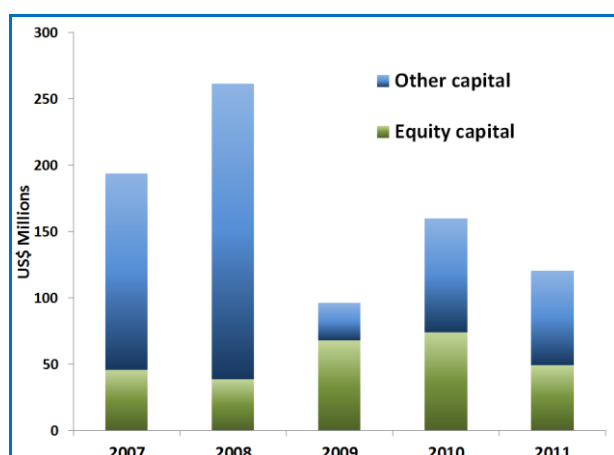
Figure 30 Foreign Direct Investment Abroad and in Curacao, 2007-2011 (US\$ Millions)



Source: Central Bank of Netherlands Antilles

Note: A negative FDI Abroad value indicates an increase in assets

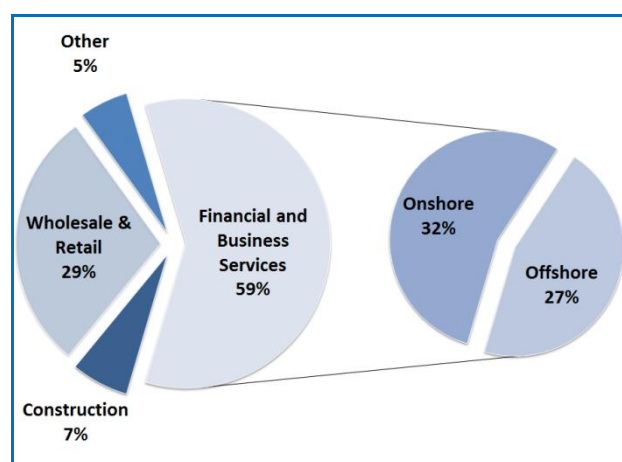
Figure 31 Composition of FDI, 2007-2011



Source: Central Bank of Netherlands Antilles

Note: A negative FDI Abroad value indicates an increase in assets

Figure 32 FDI Sectoral distribution, 2011



Trade in services and the investment environment are intimately linked. Mode 3 “commercial presence” is in effect foreign direct investment by enabling foreign investors to establish a commercial presence in a foreign territory. Investment is influenced by the economic outlook and general macroeconomic situation of a country, the country risk (sovereign and social), and the conditions

proposed through investment policies to attract investment (from simplification of procedures, to taxation policies to incentives). A recent survey by the Central Bureau of Statistics, released in April 2012<sup>45</sup>, reports on investors' perceptions relating to the investment environment in the Netherlands Antilles. In the results of the survey, which relate to 2011 figures, 30% of the investors declared that they have experienced investment obstacles while operating in the country, a significant increase compared to the 19% recorded the year before. The most severe obstacle faced (reported by 16% of respondents compared to just over 8% a year before) has been a shortage of financial resources for their investment. This has been followed by a poor market outlook (identified as a problem by 12% of those surveyed, compared to just 4% the previous year) and the policy that the government is pursuing (similar increase from 4% to 12%). There was also a slight increase observed (from 1.5% to 3%) in those respondents which indicated problems with obtaining work permits.

Only 7% of those questioned rated the investment climate as 'good', while 34% consider it to be 'bad'. This sentiment is further underlined by the business operation results expectations. Only 61% of the investors (compared to 73% the precedent year) believe that they will have managed to make a profit in 2011. However, less than 4%, only slightly higher than the year before, consider the expected profitability to be an obstacle on their investment operations. There has been increasing concern as to the outlook in the economy. Nearly half of investors questioned have said that they do not have confidence in the state of the economy. Only 3% indicated that the current situation of the economy is better when compared with the past but 49% of them have confidence that the future will be better

The survey is in line with other similar studies in the past and identifies similar problems. The policy pursued by the government was one of the major problems identified in the past as well. Although investors agree that the framework regulating the business sector in the country is favourable, identified weaknesses related to the implementation of the existing rules and procedures. An example is the case of administrative barriers. Although the regulations adopted make the economy very open, companies face many problems when trying to open a business. Procedures relating to business registration, obtaining land titles and construction permits are considered by those consulted to be bureaucratic and slow. Furthermore, investors state that they are not able to actively and effectively engage in a policy dialogue with decision makers<sup>46</sup>.

The OECD Investment profile for the Netherlands Antilles<sup>47</sup> recognises the importance of FDI and makes the following recommendations to encourage further investment, some of which remain valid today:

- The continuation of the Privatisation Programme, particularly with respect to the concessions agreements in infrastructure services, as these services are vital for the efficient operation of any economy and play a major role in the competitiveness of all other sectors

45 <http://www.cbs.cw/cbs/themes/Enterprises/Publications/Enterprises-2012041920946.pdf>

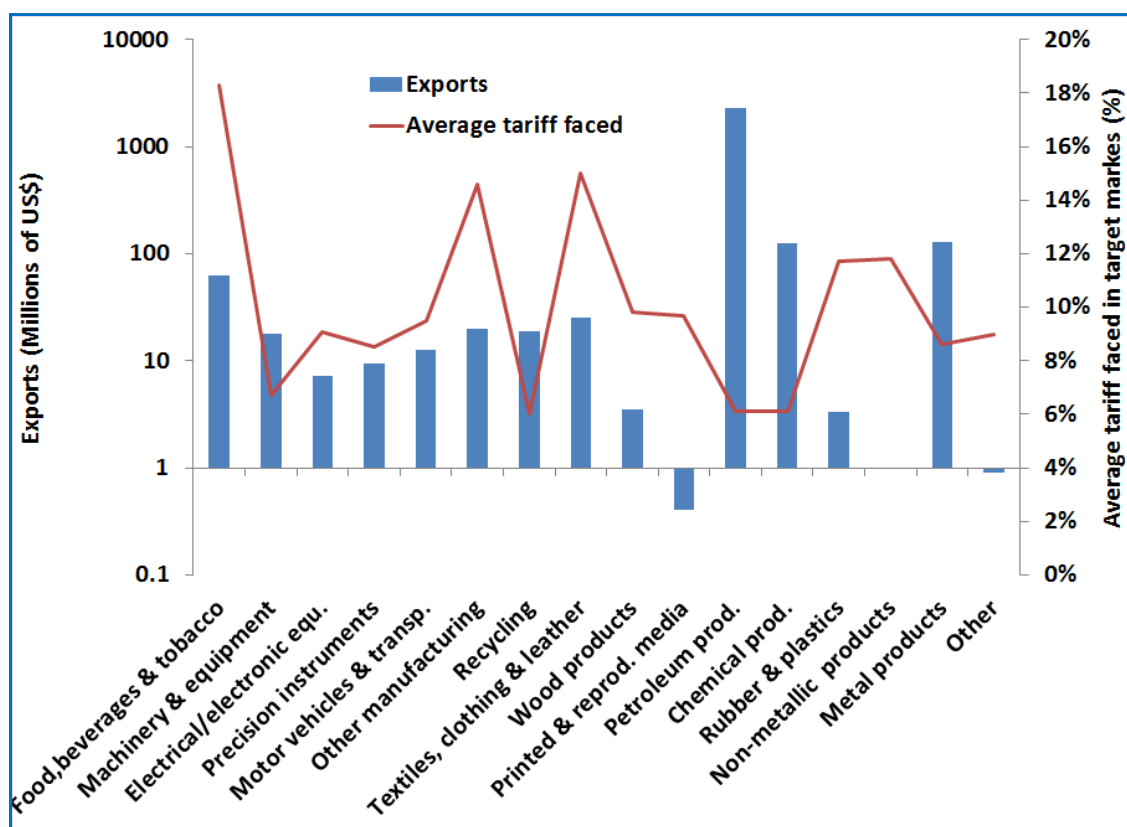
46 For a discussion on the macroeconomic determinants of investment in Curacao, please see earlier section (Chapter III, Section B)

47 OECD (2005) Caribbean Rim Netherlands Antilles, OECD Investment Policy Reviews, OECD:Paris

- The further simplification of the Tax System and to continue the fiscal reform
- The upgrading of the skills of the work force as to make it more competitive on a global market
- The adoption of competition laws for all the administrative levels
- The streamlining of administrative procedures to limit bureaucracy
- The improvement of information dissemination capabilities to provide more quality and consistency in the information provided to investors
- The design of an investment strategy for each of the islands, taking into considerations the needs and characteristics of each of them
- The monitoring of the implementation of reform measures

Using tools developed by the ITC to gage the potential for FDI in export led sectors of an economy, which match export with international demand and the market restrictions to access those markets, we identify those sectors which have the highest potential to be in the machinery and transport equipment, petroleum and chemical sectors. The value of exports and tariff faced for aggregated product groups is provided in Figure 33.

Figure 33 Investment potential in export led sectors



Source: ITC InvestmentMap

## D. The Regional and international context as they affect Curacao

### 1. Current market access conditions on relevant markets for Curacao

With such a small domestic market and production base, Curacao needs to trade in order to grow. In order for Curacao to take advantage of the world economy, its government needs to be aware of the conditions affecting market access in its most relevant trade partners. These can be considered both in terms of unilateral market access conditions or reciprocal market access ones. Unilateral market access conditions are those that apply in an export market towards any trade partner or those that may apply on preferential terms to privileged countries. For Curacao, this would be by virtue of the OCTs' special status with the EU under the Overseas Association Decision or under the EU's Generalized System of Preferences (GSP) or any other special programs such as the Caribbean Basin Economic Recovery Act (CBERA) of the United States.

Reciprocal market access benefits could also be available to Curacao should it wish to enter Regional Trade agreements with neighbouring countries. These agreements may encompass the establishment of Free trade areas, permitted in the WTO according to Article XXIV of GATT 1994 or the Enabling Clause. Considering Curacao is not a party to such an agreement, the potential costs and benefits of its participation in those that exist in its region, such as CARICOM, or in new ones to be negotiated must be assessed.

#### a. Access to the EU

Curacao is also an Overseas Country and Territory (OCT) of the European Union. From a trade point of view, they are not integrated in the customs territory of the European Union and they are not subject to the EU acquis. Yet, they are associated with the EU. They benefit from a preferential trade treatment, which is cast in the EU Treaty itself. Their status is currently governed by Part IV (Articles 198 and fol.) and Article 355.2 of the Treaty on the Functioning of the European Union (EU Treaty)<sup>48</sup>, annex II to the EU Treaty and by the Council Decision (2001/822/EC) of 27 November 2001 on the Association of the Overseas Countries and Territories with the European Community ('Overseas Association Decision' or, hereinafter the 'OAD')<sup>49</sup>.

Since the revision of the Overseas Association Decision in 1991, the OCTs have benefited from the most generous tariff regime granted by the Community, under which all '*products originating in the OCTs*' can be imported into the Community free of duty and free of quota. The OCTs actually have

48 Numbers are those of the Treaty on European Union and the Treaty on the Functioning of the European Union (replacing the EC Treaty), as last amended by the Treaty of Lisbon, signed on 13 December 2007 and entered into force on 1st December 2009.

49 O.J.E.U. L 314/1 of 30 November 2001.

been benefiting from a larger preferential margin in the EU as compared to other developing countries and till recently even in respect of LDCs.

In addition the OCTs are subject to a preferential regime of rules of origin and special provisions on transshipment.

With respect to rules of origin, those contained in the OAD enable cumulation with ACP or EU originating goods. In other words, materials originating in the Community or in the ACP states can be considered as if they originate in an OCT when incorporated into a product obtained in that OCT. As a consequence, such products acquire OCT originating status and thus benefit from the tariff regime applicable to OCTs.

As to transshipment, this enables products not originating in an OCT, but which are in free circulation in that OCT and re-exported to the Community, to be accepted for import into the Community free of customs duties and taxes with equivalent effect. This provision is rather unprecedented in EC trade preferences as in theory it legitimize trade deflection, which is the underlying reason to maintain stringent rules of origin. However, the products must comply with the conditions laid down in the Overseas Association Decision and must in principle have been subject to a change in the means of transportation in the OCT, implying at least the unloading and reloading of the goods. Most importantly, the Overseas Association Decision specifies that, for these products, customs duties comparable to the customs duties applicable in the Community must have been paid in the OCT concerned, and that any refunding of such payments is prohibited.

It should be noted however that the transshipment procedure does not apply to agricultural products or goods resulting from the processing of agricultural products<sup>50</sup>. The exclusion of agricultural products from the transshipment rules is probably due to the high protection for agricultural products in the EC and the potential case for fraud.

The European Commission would like to reconsider the transshipment facility. The objective of this facility was to help the OCTs which had harbour facilities to exploit them by offering them as a convenient hub for the re-routing of the merchandise coming from the different parts of the region. The Netherland Antilles in particular, was supposed to be the main beneficiary. According to the EC, the expected outcome has not materialised and harbour services in the former Netherland Antilles have not developed. Furthermore, the Commission is keen to avoid simple re-routing of merchandise through the OCTs without serious economic rationale, so as to avoid useless diversion of trade.

Inevitably, the close connection with the EU provides a favourable framework for exploring opportunities for trade and investment with the EU Member States. In particular, despite the current challenges related to the renegotiation of the OAD, the means to better use the transshipment facility should be further explored. In addition, Curacao, like the other OCTs, is an eligible beneficiary of the

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<sup>50</sup> see Green paper Future relations between the EU and the Overseas Countries and Territories Brussels, 5.6.2008 COM(2008) 383 final; Commission staff working document accompanying the Green Paper Future relations between the EU and the Overseas Countries and Territories (COM(2008) 383 final, 25.6.2008 SEC(2008) 2067. The fact that the EU would like to suppress the transshipment procedure was further confirmed in its last Green Paper "Elements for a new partnership between the EU and the overseas countries and territories (OCTs)", COM(2009) 623 final, 6 November 2009.

European development Fund and it will be important for it to maximise the benefits it may draw from it<sup>51</sup>.

**b. Access to the United States Market**

The United States grants trade preferences to Caribbean OCTs<sup>52</sup> under three programs: (1) Caribbean Basin Economic Recovery Act (CBERA), and the successive amendments by the CARIBBEAN BASIN TRADE PARTNERSHIP ACT (CBTPA) and the HOPE Act; (2) the Generalized System of Preferences (GSP); and (3) production-sharing programs. In recent years however, there has been some overlapping among these trade preference programs.

The Caribbean Basin Economic Recovery Act (CBERA) was part of the Caribbean Basin Initiative (CBI). The program was aimed to encourage economic growth and development in the Caribbean Basin countries by promoting exports of non-traditional products. CBERA offers unilateral preferential duty to Caribbean Basin countries and territories. The program allows exporters from certain beneficiaries to claim duty-free or reduced-duty treatment for a list of eligible products imported into the customs territory of the United States. In May 2000, the United States–Caribbean Basin Trade Partnership Act (CBTPA) extended trade preferences to textiles and apparel from the region. In fact one the main differences from CBERA and CBTPA is that the latter provides for duty free and quota free for textiles and clothing articles originating in Beneficiaries countries.

In order to become a beneficiary of the CBTPA, the President of CBERA needs to recommend a country as being eligible for CBTPA benefits and certain criteria needs to be met, criteria relating to the extent to which the country has carried out its WTO commitments, participated in the Free Trade Area of the Americas (FTAA) negotiation process, protected intellectual property rights, provided internationally recognized workers' rights, implemented its commitments to eliminate the worst forms of child labour cooperated with the United States on counter-narcotics initiatives, implemented an international anticorruption convention, and applied transparent, non-discriminatory, and competitive procedures in government procurement.

The U.S. Generalized System of Preferences (GSP) and production sharing are the other two US trade preferential programs. GSP has been in effect since January 1, 1976 and provides nonreciprocal duty-free entry for products under about one-half of the dutiable tariff lines in the HTS from 131 beneficiary developing countries (BDCs). As GSP is a temporary instrument containing graduation clauses and as countries become 'high income' countries, they graduate out of GSP benefit.

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51 See Luff, D., P. Baker & Balestieri, E. (2010) The Analysis of the Regional Economic Integration Processes (Caribbean, Indian and Pacific Ocean) and Recommendations aiming at enhancing trade and economic activity of OCTs within their region and with the EC, DFC, Final Report.

52 This section has drawn from the annual reports of the US International Trade Commission : The Impact of the Caribbean Basin Economic Recovery Act Nineteenth Report 2007-2008.USITC and other materials available in the US.ITC website



As part of the Caribbean Basin Initiative, the United States had a “special access program” that allowed apparel made in participating CBERA countries from U.S.-formed and cut fabric to enter under preferential quotas known as guaranteed access levels, but still be subject to duty on the value added abroad. The program was used extensively for the production of apparel and textile luggage in CBERA countries prior to the implementation of CBTPA in late 2000. This program led to a significant boost to U.S. apparel imports from CBERA countries<sup>53</sup>.

Under the US GSP rules of origin<sup>54</sup> there are across the board percentage calculation rules providing that: *the sum of the cost or value of materials produced in the beneficiary country plus the direct costs of processing must equal at least 35 per cent of the appraised value of the article at the time of entry into the United States*<sup>55</sup>. Moreover the US GSP rules of origin provides that *an article must be shipped directly from the beneficiary country without passing through the territory of any other country or, if shipped through the territory of another country, the merchandise must not have entered the commerce of that country en route to the United States*<sup>56</sup>. An importer may request GSP treatment simply by placing the prefix “A” before the HTSUS tariff number on the entry documentation. No additional form is required. The only exception to this principle is for certain textile products.

### **c. Limitations to market Access**

Outside of tariffs, there are some substantial limitations to market access. A major area of difficulty in this regard relates to food safety and SPS requirements. These are the most formidable barriers to reaching a diversified export base. Some new practices such as private voluntary standards and regulations included in the EU novel food regulation could represent an additional difficulty for Curacao to export manufactured goods to the EU. The additional costs associated with compliance will affect the competitiveness of SMEs which cannot absorb the high fixed costs in large volumes of output. On the other hand, by adopting such high standards, SMEs may produce higher quality (and priced) niche products, which will not require competition based on prices, thereby satisfying the unique situation of limited resources and limited production capacity in Curacao.

Furthermore, one of the principal conditions for preferential market access relates to rules of origin in the EU and in other markets. Flexibilities on rules of origin in the sector of fish in the EU market is a key issue. Cumulation is an option in this regard but a general relaxation of the rules of origin requirements for live and processed fish as granted to the ACP Pacific countries would be the optimal solution for Curacao should it invest in the fisheries sector.

53 \_ Except from: The Impact of the Caribbean Basin Economic Recovery Act Nineteenth Report 2007-2008.USITC.

54 \_ see UNCTAD Handbook on US gsp scheme of US and Inama ,Rules of origin in International Trade, Cambridge University press,2009

55 \_ see UNCTAD Handbook on US GSP scheme of US

56 see UNCTAD Handbook on US GSP scheme of US

## 2. Regional economic integration processes

### a. Status of Regional Integration

Regional integration in Caribbean countries is not straightforward. Most States, except the Dominican Republic, are members of the Caribbean Community (CARICOM), which is the only regional agreement notified to the WTO. The CARICOM entered into force on 1<sup>st</sup> August 1973, as a rather incomplete free trade zone. In 1989, the CARICOM Treaty was amended, with a view to create a customs union and a Single Market and Economy (the CSME) by 1<sup>st</sup> January 2006. All CARICOM members agreed to provisionally implement Protocol IV on Trade Policy, establishing the single external tariff and containing the common trade provisions. These entail free movement of goods, services and capital, unrestricted right of establishment, a customs union together with the adoption of a simplified tariff structure and the reduction of the common external tariff (CET) to a maximum of 20% on non-agricultural goods and 40% for agricultural goods. The revised Treaty of Chaguaramas also provides for the progressive elimination of restrictions on banking, insurance and other financial services between the Member States. An agreement on financial services (Caribbean Financial Services Agreement) will provide an operational framework for the intra-regional free movement of capital and financial resources, with the aim of establishing a continuous financial services market within CARICOM and introducing identical requirements for all financial institutions operating in the region. Curacao has applied to become associated Member of CARICOM.

*The Organization of East Caribbean States (OECS)* comprises Antigua-and-Barbuda, Dominica, Grenada, Montserrat, St-Kitts-and-Nevis, Saint-Lucia, and St-Vincent-Grenadines. Anguilla and the British Virgin Islands are OECS Associate Members. The Treaty of Basseterre established this organization on 18th June 1981. Its purpose is to consolidate and deepen CARICOM's objective among the latter's poorest members. In July 2001, Heads of Government decided to fully integrate their economic and foreign policies. The Annex to the OECS contains the 1968 Agreement establishing the East Caribbean Common Market (ECCM), which, amended in 1981, harmonizes trade and customs regulations. A common currency, the ECCM dollar, was created in 1983, with a regional central bank in Basseterre, St Kitts. ECCM members coordinate among themselves before interfacing with CARICOM and before concluding any international agreement<sup>57</sup>.

*The Association of Caribbean States (ACS)* comprises the so-called Group of Three (Colombia, Mexico and Venezuela), the five Central American countries (El Salvador, Costa Rica, Guatemala, Honduras and Nicaragua), the 14 CARICOM countries, and non-grouped countries (Cuba, Panama, and the Dominican Republic). Associate Members are Aruba, Curacao, St Maarten, The Turks and Caicos and France, on behalf of Guadeloupe, Martinique and French Guiana. The Convention establishing the ACS, adopted on 24 July 1994 in Cartagena, Colombia, is intended to facilitate consultation, cooperation and concerted action among its parties on economic policies, and to

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57 See <http://www.oecs.org/>

gradually promote economic integration, trade liberalization and investment. Though the ACS has failed to establish a regional preferential tariff, its special Committee on Trade and Development plays an important role in facilitating trade among the parties and in coordinating trade negotiations<sup>58</sup>.

*The Caribbean Forum of Caribbean ACP States (CARIFORUM)* comprises CARICOM countries and Dominican Republic. Cariforum was established in 1992 with a view to coordinating the relationship with the EU in the context of the EU-ACP preferential agreements. Cuba joined it in October 2001 and also signed a “partial scope” free trade zone with CARICOM. Negotiations with the EU on the future economic partnership agreements have been conducted through CARIFORUM, using the CARICOM's *Regional Negotiating Machinery*. CARIFORUM States have now signed an Economic Partnership Agreement with the European Union on 15 October 2008 (see below).

*The US Caribbean Basin Initiative (CBI)* is intended to facilitate the economic development and export diversification of the Caribbean Basin economies. Initially launched in 1983, through the *Caribbean Basin Economic Recovery Act (CBERA)*, and expanded in 2000 through the *US – Caribbean Trade Partnership Act (CBTPA)*, the CBI currently provides beneficiary countries with duty-free access to the US market for most goods. The CBTPA entered into force on 1 October 2000, and continues in effect until 30 September 2020, or the date on which a free Trade agreement enters into force between the US and a CBTPA beneficiary country. The CBERA beneficiary countries are: Antigua and Barbuda, Aruba, Bahamas, Barbados, Belize, British Virgin Islands, Dominica, Grenada, Guyana, Haiti, Jamaica, Montserrat, Netherlands Antilles, Panama, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, and Trinidad and Tobago. The beneficiaries of the CBTPA are: Barbados, Belize, Guyana, Haiti, Jamaica, Panama, St. Lucia, and Trinidad and Tobago.

#### **b. Access to Regional market**

Interest in a rapprochement between the Netherlands Antilles and CARICOM has been the subject of studies for some time. In 2001, a study was commissioned by ECLAC to evaluate the options for integration the Netherlands Antilles in the Caribbean Community (CARICOM), which also looked into barriers to trade between the two regions and the measures required to increase trade between the Netherlands Antilles and CARICOM<sup>59</sup>. After the 10.10.2010 autonomous status, a study also delved into the opportunities arising from closer integration with the CARIFORUM States<sup>60</sup>. Currently the level of trade with CARIFORUM countries is relatively small. As mentioned earlier, only 5% of exports are destined to this market (whereas imports from CARIFORUM amounted to 1.9% in 2010). Exports are highly concentrated, with two thirds of exports accounted for by just six products (see Figure 34).

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58 See <http://www.acs-aec.org/trade.htm>

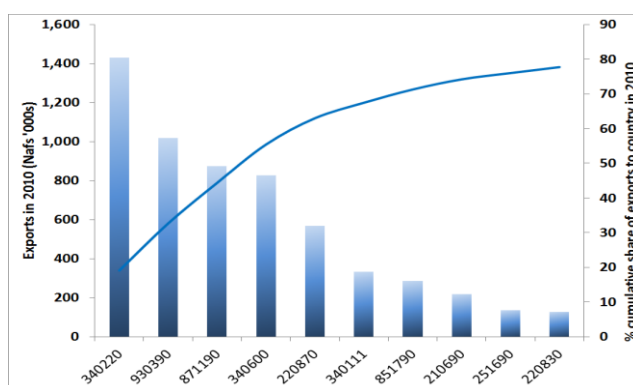
59 ECLAC (2001) The Netherlands Antilles: Trade and Integration with CARICOM, Report LC/CAR/R. 681, ECLAC: Santiago de Chile, 21st December

60 CARIFORUM States include all fifteen CARICOM States and the Dominican Republic and was an offshoot of the Caribbean ACP Group's negotiations with the EU for an Economic Partnership Agreement.

Figure 34 Exports from Curacao to CARIFORUM in 2010

Exports from Curacao to CARIFORUM in 2010  
(Top ten exported products are listed)

HS Code	HS 2002 Product Description	('000s Naf)
<b>Total Exports</b>		<b>7,492</b>
340220	Surface active preparations (retail)	1,431
930390	Other firearms	1,019
871190	Other motorcycles	874
340600	Candles, tapers and the like.	828
220870	Liqueurs and cordials	567
340111	Soap for toilet use	334
851790	Parts of line telephony	286
210690	Other food preparations	220
251690	Other monumental or building stone	135
220830	Whiskies	129



Source: Author calculations based on CBS Statistics

Currently Curacao imports around nine times more than it exports to CARIFORUM States. The export structure of the CARIFORUM States is more diversified than Curacao and more competitive, particularly from Jamaica and Trinidad and Tobago. Curacao records a significant trade deficit with CARIFORUM countries, where the main suppliers to Curacao are the Dominican Republic, Trinidad and Tobago and Jamaica, which account for four fifths of its imports from CARIFORUM<sup>61</sup>. With regard to CARICOM's trade regime, it can be noted that quantitative restrictions and non-automatic licensing requirements are applied by many CARICOM countries to most food products, beverages and in the case of CARICOM LDCs, some specific strategic product groups<sup>62</sup>. According to various studies and business representatives, the principal barriers to trade between Curaçao and CARICOM consist of tariffs, tariff quotas, other taxes and surcharges, non-tariff measures, import quotas, import prohibitions, price control measures, safeguards, Sanitary and Phyto-Sanitary (SPS) measures, contingent protection, valuation rules, and monopoly measures<sup>63</sup>. From a tariff standpoint, Curacao has a more liberal trade regime for CARICOM imports than the reverse. In services, the obligations made by CARICOM countries in the WTO resemble the general commitments set by Curacao<sup>64</sup>.

With regards to the potential static gains for Curacao in negotiating a partial scope agreement or full membership with CARICOM, studies suggest that these would be very limited owing to the fact that the local manufacturing base is small and uncompetitive, trading items similar to what already exist in several CARICOM member countries. The uncompetitive nature of wage rates compared to CARICOM rates, along with significant shipping costs are also listed as constraining factors to make

61 Placide, L. (2010) Doing Business between CARIFORUM and Curacao (with particular reference to agro-processed goods and management consulting services), Caribbean Export

62 Baker, P. (2012) Review of Article 164 of the Revised treaty of Chaguaramas and Products benefitting thereunder. Report CISP/CCS/1.4.2.1/SER10.11, 6 March; WTO (2003) Trade Policy Review Haiti: Report by the Secretariat Revision, 7 October, WT/TPR/S/99/Rev.1; WTO (2004) Trade Policy Review Belize: Report by the Secretariat, 14 June 2004, WT/TPR/S/134; WTO (2007a) Trade Policy Review: Overview Report by the Secretariat OECS-WTO Members, 1 October 2007, WT/TPR/S/190; WTO (2007b) Trade Policy Review: Report by the Secretariat Antigua and Barbuda, 1 October 2007, WT/TPR/S/190/ATG; WTO (2007c) Trade Policy Review: Report by the Secretariat Dominica, 1 October 2007, DMA; WTO (2007d) Trade Policy Review: Report by the Secretariat Grenada, 1 October 2007, LCA; WTO (2007e) Trade Policy Review: Report by the Secretariat St Vincent and the Grenadines, 1 October 2007, WT/TPR/S/190/VCT

63 ECLAC (2001), *ibid*

64 Placide, L. (2010), *ibid*

static welfare gains for the country. There could be an opportunity for CARIFORUM States to source raw materials from Curacao and benefit from the rules on cumulation to export to the EU, although there is little that Curacao extracts or produces locally, except for some limited agricultural produce. Hence, few, if any, trade gains are expected from closer trading arrangements between Curacao and CARICOM. In the area of services trade, there are likely to be greater opportunities for Curacao, and these have been identified in a recent study<sup>65</sup>. From a foreign policy point of view, aligning its interest with those from the CARICOM block may assist it in trade negotiations with third parties. In particular, CARICOM is at the moment in the midst of negotiations with Canada and with the Central American Common Market which could provide interesting opportunities to Curaçao.

CARICOM would also have the advantage of sharing institutions that deal with trade, such as the CARICOM Regional Organisation for Standards and Quality (CrossQ) or the Office for Trade Negotiations (OTN). Moreover, CARICOM's advances on efforts such as regional preparation towards climate change adaptation policies would benefit Curacao. Joining CARICOM would however result in higher tariffs which would inevitably hurt the island since it is so dependent on imports, as well as restrain its independence in setting its own foreign policy agenda. To overcome this problem, some studies have suggested that Curaçao negotiates a partial Scope Trade Agreement that could focus on reducing not only tariffs but also non-tariff barriers and custom arrangements with CARICOM.

### 3. The CARIFORUM-EU Economic Partnership Agreement

The CARIFORUM countries (except Cuba and Haïti) signed the Economic Partnership Agreement (EPA) on 15 October 2008<sup>66</sup>. The agreement was also notified to the WTO. Haiti signed on 15 December 2009.

Pursuant to the EPA, the EU grants duty free quota free market access to all signatory CARIFORUM countries. The ACP Caribbean countries in turn must liberalise 61.1% of the EU imports (in value terms) for the first 10 years, 82.7% over 15 years and 86.9% over 25 years (representing 90.7% of the total tariff lines). The pace of liberalisation will be faster for the Dominican Republic who already has a trade liberalisation agreement with the US. The main sensitive products excluded from tariff liberalization on the Caribbean side are in the sectors of agricultural and processed agricultural products; chemicals, furniture and other industrial products. The EPA also contains important services and investment chapters. The EU made several commitments in services, including on Mode 4 (temporary movement of professionals), even if the Caribbean countries still consider the latter insufficient, since they are in practice conditioned by several qualification requirements for ACP nationals. EU commitments cover on the whole 94 % of its services sectors. The agreement also contains commitments of the EU to engage into regulatory development and harmonisation with the

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65 Placide, L. (2010), *ibid*

66 Guyana signed the EPA on 20 October 2008.

ACP countries in areas such as tourism, maritime transport, banking, computer services and courier services. The ACP Caribbean countries also made several market access commitments in favour of EU services and service providers. The extent of their commitments is on average 75% of the services sectors.

Furthermore, the EPA contains provisions pertaining to the fight against corruption, the preservation of environmental standards, the protection of intellectual property and technological innovation and provisions on cultural diversity. It also contains an asymmetric MFN clause. Any more preferential treatment granted by the EU to a third country must be extended to the signatory CARIFORUM countries, while the latter will only have to extend to the EU the more preferential treatment granted to a major trading economy. This MFN provision does not apply if the more favourable treatment is applied by the CARIFORUM countries among themselves or as part of a larger regional integration process.

Finally, the EPA has an *Aid and Development Chapter*. The European Commission mobilized €165 million to the European Development Fund (EDF) to support the Caribbean countries in the next five years. Additional amounts have been made available through national indicative programmes for a comprehensive amount of € 454 million.

Currently, the focus of the discussions between the European Commission and the Caribbean countries concerns the implementation process, since several CARIFORUM States do not seem to follow through on their EPA commitments.

#### **4. Curacao and the World Trade Organisation**

Curacao is not a WTO Member in its own right, i.e. as separate customs territory. One could argue, however, that it is subject to the rules of the WTO by the fact that the Dutch Kingdom is itself a WTO Member, disjointedly from the European Union. Therefore, the commitments taken the Dutch Kingdom would also apply to Curacao, even if it is not part of the EU customs territory. However, the Dutch Kingdom does not seem to have negotiated or obtained reservations for Curacao.

The Study Team was informed during its on-site visits that the Curacao's Government wishes to pursue separate membership of the WTO and that it has engaged into the preliminary steps in this regard. .

#### **5. Impact of the Regional and international context on Curacao and challenges**

The changes of the international trade framework affecting the Caribbean ACPs and the signature of the EPA agreements have an impact on Curacao, even though not a direct one.

The EU-CARIFORUM EPA does not substantially affect the immediate trade environment for Curacao, which will not directly benefit from increased market access in the Caribbean ACP markets, unless Curacao enters into some form of arrangement with them. Furthermore, the Caribbean ACP States will also not enjoy additional market access in Curacao, the latter not being part of the EU customs territory.

However, the expected developments described above will have an indirect impact on Curacao. They may lead to increased competition of the Caribbean ACP States in the current or future export markets of Curacao. With the EPA, the ACP countries are expected to become more competitive as they consolidate themselves into a more integrated regional trading block. This phenomenon may even be strengthened by the additional efforts of the Caribbean ACP countries to achieve regulatory reform and progressive legal harmonisation with the EU. The latter will also be bound, under the EPA, to provide assistance to the ACP to improve their infrastructure and market regulation. Curacao faces the risk of being left behind, with the adverse consequence that its integration into regional and international markets, should it wishes to do so, could be hindered.

At the same time, the Caribbean ACP countries may constitute a potential interesting new export market for Curacao's products and services as it better structures its economy. The populations in neighbouring Caribbean ACP States in particular would constitute obvious customers should their standards of living improve and their tastes become more demanding in terms of quality. Furthermore, there might be possibilities to develop regionally integrated production activities and plug into global supply chains. There might thus be, in the medium to long term, mutual benefits in gradual liberalisation of trade between the Caribbean ACP and Curacao. At this stage, both groups of countries and territories maintain barriers to trade towards each other and do not really trade together. A change of policy in this respect should be considered and, as indicated in the chapters below, could make sense.

Regarding Curacao's relationship with the WTO, the applicability of the WTO rules to Curacao is at best uncertain (see above). Therefore, it remains uncertain what impact the outcome of the current Round of negotiations (the Doha Development Round – DDR) will have on Curacao should it be concluded. However, in a globalised world, and considering Curacao is not living in complete autarchy, the outcome of the negotiations will entice it to amend several policies and adjust to the new trading environment. This is particularly the case in the sector of agriculture, which will witness price increases. Possible social pressure and the realisation that there might be lost opportunities for export revenue through inertia will provide the necessary impetus for change. The DDR may lead to a general increase of market access conditions and more disciplines in international trade that should favour exports from all countries, whether developed or developing ones. Curacao will inevitably also benefit from the increase of trading opportunities generated by the Round, even if it will not be able to enforce market access rights. This is another encouragement to engage in production diversification and export-led strategies to increase its external revenue and sustain external price shocks. Particular new opportunities due to the possible success of the DDR seem to emerge in the sectors of fish and fish products, forest products, gems and jewellery, raw material, tropical/exotic fruits and vegetables,

pepper, organic coffee, tea, rice, rubber, and environmental goods and services. Curacao should consider defining strategies to take advantage of these occasions.

This however, will not be straightforward. Challenges remain important and time plays against the interests of Curacao. Many developing countries, including the Caribbean ACP, already initiated processes of economic transition to take advantage of the possible new multilateral trade context. Also, preferences that Curacao currently enjoy will gradually be eroded. Meanwhile, the ACP WTO Members will have to grant better market access to other WTO Members and will be faced with competitive pressures. Despite some short-term losses in inefficient sectors, this is expected to lead to more efficient economies. Furthermore, all WTO Members are reviewing their domestic legislation with the view to upgrade it, improve the business environment and make it compatible with the WTO rules. With the support of technical assistance, they are also engaging in policies aimed at increasing product competitiveness and they are making investments in productive infrastructures. All this will improve conditions of production and of trade in their territories. Furthermore, WTO Members will also benefit from additional recognised rights in the WTO which will enable them to alleviate the still numerous non-tariff barriers to trade affecting their exports. The NTB initiatives in NAMA, services commitments, stricter trade remedy procedures and IP protection all play in their favour. While many developing countries are still at the very beginning of their transition process, they have at least started it. The first countries among developing countries to become competitive will draw the biggest benefits from the round and the globalised economy. Curacao will have to sustain this competition.

Another effect of the current international developments, should Curacao decide to integrate more in the international trade scene, will be the one of governance. Open economies must be regulated, not only to ensure fair competition, but also to protect important societal values against predatory businesses. Consumer protection laws, labour protection laws, etc must be revised so that they do not constitute illegitimate or useless barriers to trade while at the same time they maintain their effectiveness in pursuing their original goal. Opening trade entails re-regulation of the market. In that process, the WTO mandates disciplines. Doha negotiations intend to strengthen them, with possible strong impacts in important sectors, such as financial services or telecommunications services. For Curacao, the reshaping of the rules will have an impact not only on conditions of competition in its export markets, but also in the way it will regulate its own market. Indeed, the more harmonised its domestic legislation, its standards and technical regulations will be with those of its trade partners, the highest its export opportunities will be.

Other important challenges also occur at the level of individual enterprises. Curacao's firms should plan their marketing strategies according to the current international developments and the immediate indirect benefits they will be able to draw from increase market access opportunities which may result from the DDR. Key investments, however, would also have to be made in order to ensure their future competitiveness. Proper information of the private sector on the international developments and their implications, sector by sector, is thus essential.



## E. Sectoral analysis

### 1. Methodological note to identify sectoral priorities and policy responses

#### a. Diagnostic and identification process

While we earlier presented an analysis of the economic situation from a macroeconomic standpoint, we now present a bottom-up approach to analysing the sectoral performances and the causes of weak development, with a view to identifying opportunities for growth in Curacao. By analysing the determinants of growth from micro-foundations, we are able to better identify the key drivers of sectoral growth, the sectors with the greatest potential and the policy mix best suited to promoting the sectors.

We adopt a number of industrial policy and microeconomic approaches which have been addressed in the economic literature and which lend themselves to this framework. Classical growth models rely on capital accumulation to explain differences in growth rates<sup>67</sup>, while endogenous growth models explicitly incorporate determining factors of growth which are internal to the model rather than being exogenously determined<sup>68</sup>. Variations of such models have incorporated technology and R&D, with innovation emerging as an outcome of investments in industrial research by forward-looking and profit-seeking operators<sup>69</sup>. Some of these models incorporate the transmission of innovations through international trade flows and/or investment from the developed to developing countries.

We build on the approach adopted by the International Trade Centre in formulating national export strategies<sup>70</sup>. In this methodology, product groups are examined against a range of benchmarks to determine whether they should be the focus of a country's effort in export promotion. After due consideration is taken of the various macro plans and sectoral objectives established by a country, the criteria include:

- **Export potential** which is based on current and past export performance, namely current export performance, world market performance and domestic supply conditions. Products are subsequently ranked as having low, medium and high potential and ranged as being of low, medium and high importance

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67 See Kaldor, N. (1981) The Role of Increasing Returns, Technical Progress and Cumulative Causation in the Theory of International Trade and Economic Growth, in *Economie Appliquée*, 34

68 See Romer, P. M. (1994) Origins of Endogenous Growth Models, in *Journal of Economic Perspectives*, Vol 8 No.1, Winter; Barro R. & X. Sala-i-Martin (1995) *Economic growth*, New York: McGraw-Hill

69 Helpman, E. & G. Grossman (1991) *Innovation and Growth in the Global Economy*, MIT Press

70 ITC (2012) *National Export Strategy: Bhutan*, DTIS Volume II, 15 February

- **Export readiness** which takes into account the number of exporting companies, their modes of export (active or passive), product quality and price competitiveness, and their level of market intelligence and marketing skills
- **National wellbeing**, based on the concept of Gross National Happiness which relates to the impact that an industry can have on psychological well-being, education, conservation of the environment, preservation and promotion of culture and community vitality<sup>71</sup>. Export development is evaluated against each of these criteria using subjectivity and ranked according to whether it be negative, uncertain, unrelated or positive
- **Socio-Economic Impact** which is based on the potential for job creation. Sectors are classified according to current employment figures and projected job creation over a defined future period.

In addition to this framework, we adopt a cluster approach to identifying those sectors with a high potential. Industrial development through a clusters approach has been well documented in the business literature<sup>72</sup> and in the economic literature<sup>73</sup>. The underlying principal is to build on a group of products (or services) which already enjoy a comparative advantage by moving into industries closely linked to those products (or services). For example, the tourism cluster could include a host of other services and products, ranging from travel agencies, restaurants and hotels at the core to local suppliers, local retailers and banks at the periphery (see Figure 35). Public institutions and infrastructure create the enabling environment for these industries to flourish.

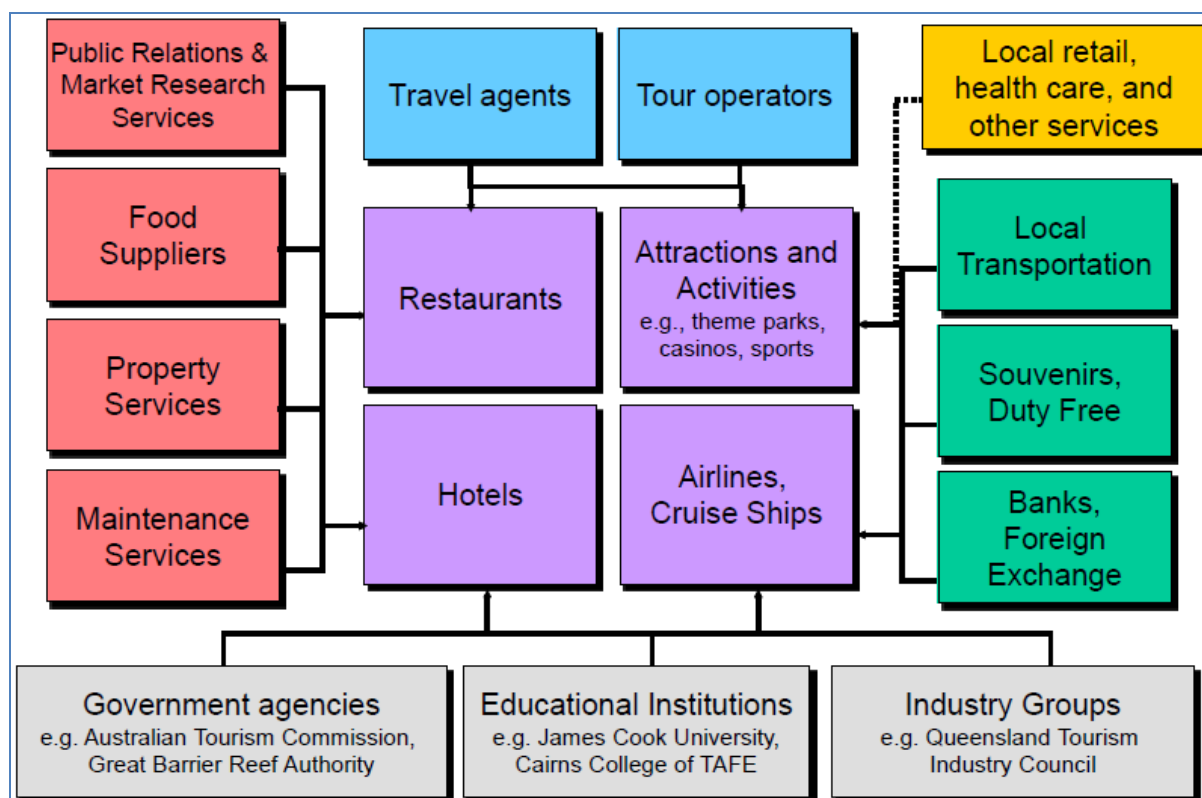
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71 Alkire, S. & Foster, J. (2007) Counting and Multidimensional Poverty Measures, in OPHI *working paper series*, 7

72 Porter, M. E. (2008) Clusters and the New Competitive Agenda for Companies and Governments, in *On Competition*, Harvard Business School Press; Porter, M. E. (1990) The Competitive Advantage of Nations, in *Harvard Business Review*, March-April

73 Hidalgo, C., Klinger, B., Barabasi, A., & Hausmann, R. (2007) The Product Space Conditions the development of Nations, in *Science Magazine*, 317(5837)

Figure 35 Example of tourism cluster for Cairns



Source: Porter, M. E. (2009) *The Competitive Advantage of Nations, States and Regions*, Advanced Management Program, mimeo, April 15

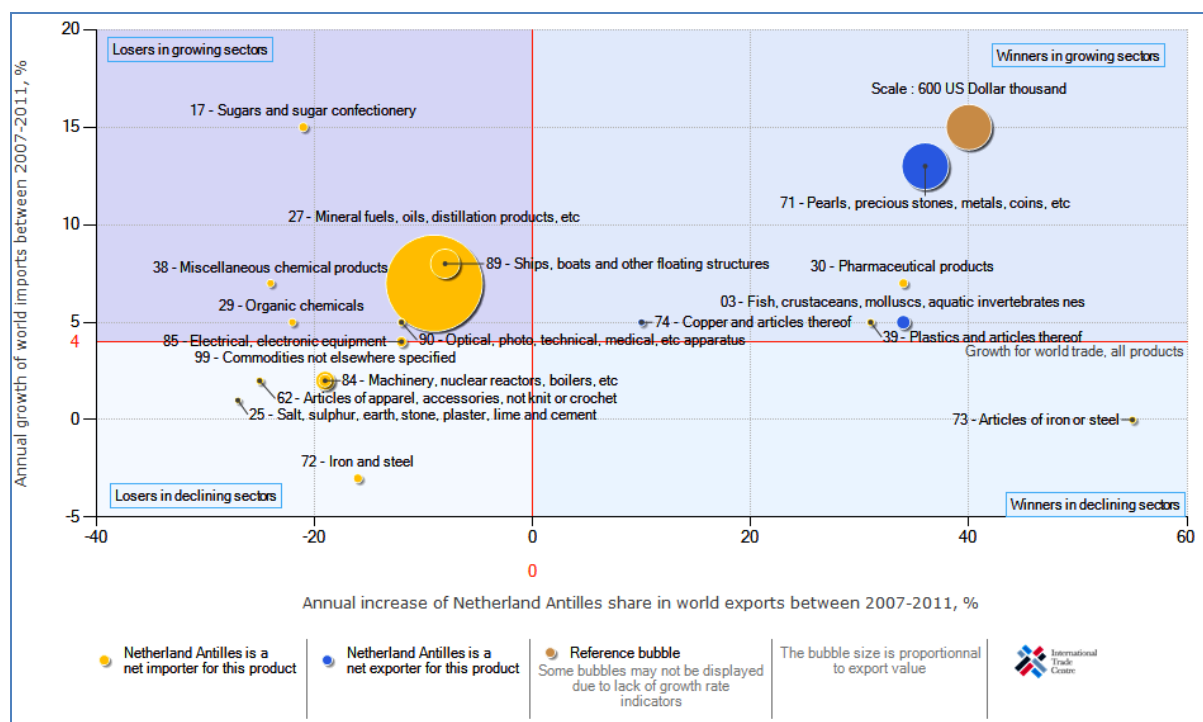
The characteristics of clusters and their role in promoting economic growth is captured in the subsequent text<sup>74</sup>: “Clusters consist of dense networks of interrelated firms that arise in a region because of powerful externalities and spillovers across firms (and various types of institutions) within a cluster. Clusters drive productivity and innovation. Firms that are located within a cluster can transact more efficiently, share technologies and knowledge more readily, operate more flexibly, start new businesses more easily, and perceive and implement innovations more rapidly. They can also efficiently access “public goods” such as pools of specialized skilled employees, specialized infrastructure, technological knowledge, and others. Clusters embody traditional notions such as input-output linkages, but much more.”

The national cluster export portfolio, which has been developed by International organisations and Business Schools, is based on the Boston Consulting Matrix approach to evaluating the positioning and performance of a product in the global market place<sup>75</sup> (see Figure 36). This competitiveness assessment, based on an international benchmarking tool, presents an indication of those sectors which are the most dynamic in the world market and where Curacao would have already some export readiness.

<sup>74</sup> Porter, M. E. (2007) *Clusters and Economic Policy: Aligning Public Policy with the New Economics of Competition*, ISC White Paper, Harvard Business School, , Rev. 10/27/09, November

<sup>75</sup> See Porter, M. E. (2009) *The Competitive Advantage of Nations, State and Regions*, Advanced Management Program, mimeo, April 15; and ITC (2010) *Trade and Competitiveness Map: Benchmarking National and Sectoral Trade Performance*, User Guide, Geneva: ITC

Figure 36 National Export Portfolio by Products, 2007-2011



Note: Data for Netherlands Antilles and refers to total trade

Source: ITC (2012) Trade Map

In a recent strand of industrial development research into the determinants of the level of sophistication of a country's exports, it has been revealed that the process of structural transformation favours nearby products (those with similar inputs)<sup>76</sup>. For example, the particular set of infrastructure, institutions, and human capital specific to one particular kind of industry is not easily transferable to another industry without substantial investment and incentives. This implies that for a country to perform well in promoting or developing a new industry or service sector, it would need to build on its current assets and institutions for similar goods and services from which existing productive capabilities can be easily adapted.

In summary, the methodology approaches the sectors based on a variety of micro-foundations which takes into account a number of factors which are assumed to lead to growth and sustainability. We present the matrix of determinants which has been used in this study to identify the sectors and services for growth<sup>77</sup> (Table 5). It is based on the 5Ms methodology with a sixth M devoted to marketing.

76 Hausmann, R. & Klinger, B. (2006) Structural Transformation and Patterns of Comparative Advantage in the Product Space. II Working Paper, 128, Center for International Development, Harvard University; Hausmann, R. & Klinger, B. (2007) The Structure of the Product Space and the Evolution of Comparative Advantage, in Working Paper, 146, Center for International Development, Harvard University; and Higlado, C. *et al* (*ibid*).

77 Pande, P., Neuman, R., & R. Cavanagh (2000) The Six Sigma Way: How GE, Motorola and Other Top Companies are Honing their Performance, McGraw-Hill: New York, NY

Table 5 Industry SWOT Analysis

Criteria	Strengths/ Weaknesses	Significance <sup>1</sup>			Effort <sup>2</sup>			Score <sup>3</sup>			Weight <sup>4</sup>
		Low	Medium	high	Low	Medium	high	Low	Medium	high	
<b>MANPOWER</b>											
Qualified labour											
Management systems in place											
Supply conditions in labour market											
Flexibility of labour market and tax											
<b>MEANS</b>											
Resources (Domestic/foreign equity)											
Investment made											
Supportive financial institutions											
<b>METHODS</b>											
Management in place											
Rivalry and competition											
Supply chains											
Support services											
<b>MACHINES</b>											
Technology endowments											
R&D requirements											
IP protection											
<b>MEASURABLES</b>											
Past performance											
Outlook											
Surveys and other data											
<b>MARKETING</b>											
International Demand											
Strategy and Plans											

Source: Adapted from Pande, P., Neuman, R., & R. Cavanagh (2000)

The 6M analysis of industrial sector is inward looking and takes a critical view of the drivers of competitiveness in the industry and determines the national performance in this regard. It combines SWOT type of analysis with a scoring system developed by the team to add the degree of prioritisation given to each sector. Each criterion is evaluated based on the discussions that the team held with stakeholders during the consultation process of the consultancy. Whenever statistical data is available, these have been used to back up the interpretations given by the team and add greater objectivity to the analysis.

Figure 37 Selection criteria



Source: Authors

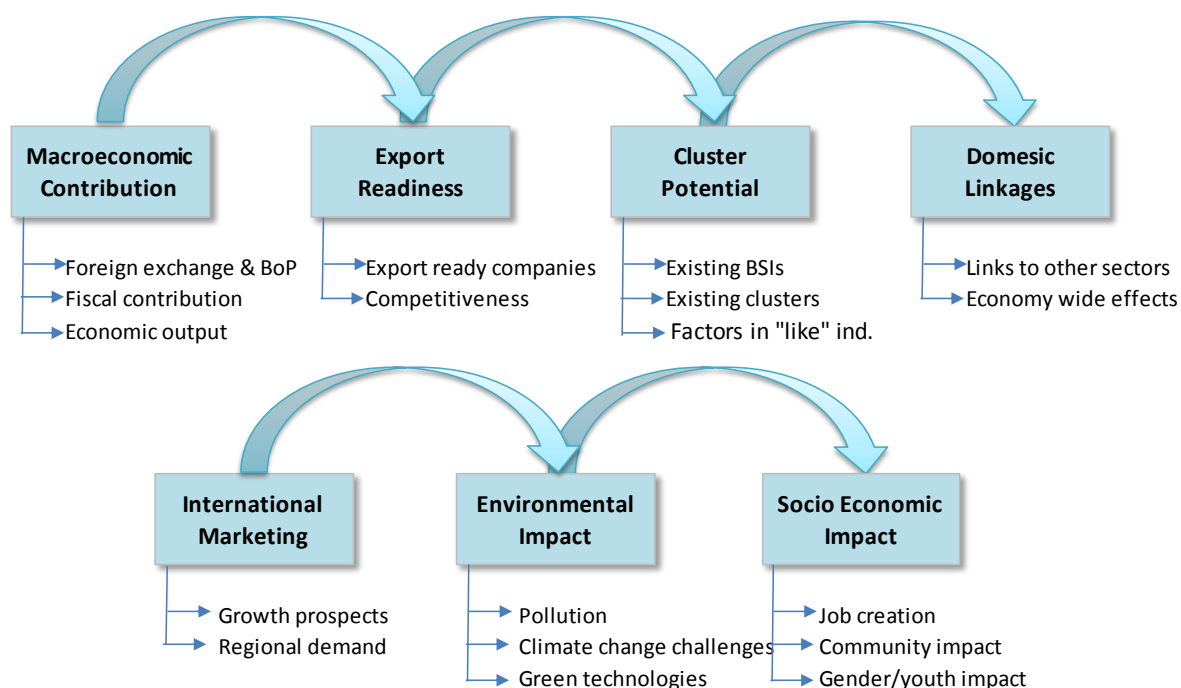
After undertaking the industry specific analysis of the 6Ms, the team takes a wider view of the economy wide impact arising from supporting an industry. In this regard, the team specifically appraises the sectors contribution to a wide variety of elements which are considered propitious for Curacao's society. These include how the sector will support macroeconomic aggregates (from foreign exchange and balance of payments elements to the government budget), how ready are companies to compete

internationally, the degree to which the sector builds on existing factors of production and are within existing clusters, the level of linkages which would be created with the local economy, the international outlook for the given sector, and the sustainability elements related to promoting the sector, which include the environmental and socio-economic impacts (see Figure 37).

The combination of these criteria are considered to be the underlying basis for identifying those sectors which show the greatest growth potential and long term sustainable outlook. The criteria are further refined to capture more precisely the different elements which are considered important in defining the importance of the sector and in order to achieve long term growth (See Figure 38).

The results obtained from various World Bank's Doing Business reports have been used to benchmark industry in Curacao against competing nations. The fact that Curacao is not part of the survey makes it difficult to obtain comparable data though discussion held, CBS surveys and various sectoral reports and Master Plans provide a useful approximation of some of the cross cutting issues which constrain the business environment in Curacao.

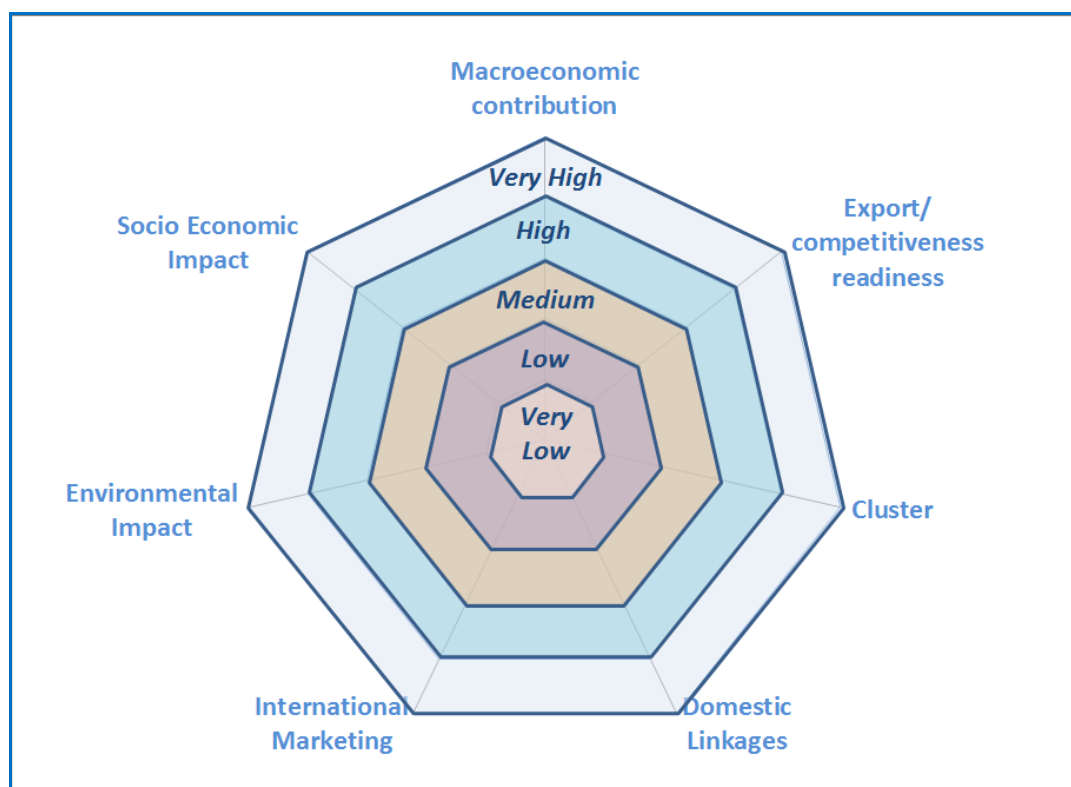
Figure 38 Detailed selection criteria for sector identification



Source: Authors

The results are provided in a graph, as illustrated in Figure 39. The further out are the points on each of the 7 axes in Figure 39, the stronger is the contribution of the sector to each of the criterion evaluated.

Figure 39 Sector's contribution to Curacao



### b. Policy responses

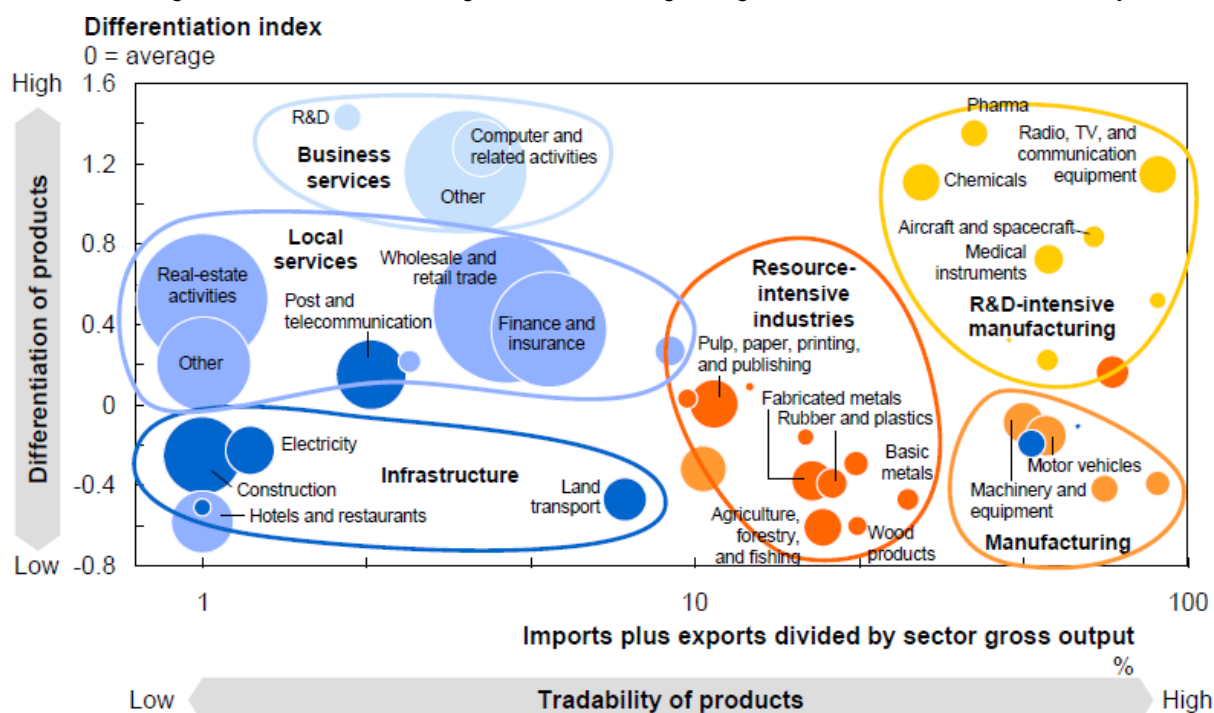
The policy response to promote sectors is one which is drawn from McKinsey Global Institute and relies on a set of policy formulae which take into account the degree to which governments may manipulate the competitive environment of a product<sup>78</sup>. Sectors are evaluated as to whether they are tradable or not, in order to determine whether the sector must compete with international suppliers. If they are **not** tradable, these can be considered to be shielded from foreign competition and their success will depend primarily on the regulatory environment, current market structure and local demand. Sectors are also evaluated according to the degree of differentiation that exists therein. The greater the degree of differentiation, the greater the level of sophistication in the sector, which requires policies to address these specific differences (see Figure 40).

The research produced by McKinsey Global Institute (MGI) focus on case studies in a variety of sectors and provides pragmatic policies based on lessons learnt. They review successes and failures surrounding government policies in picking champions, in providing incentives to capital intensive sectors and highlight the cautious policies which should be taken for emerging sectors. In a country like Curacao which has a relatively narrow economic base, it is tempting for policy makers to single out emerging industries. The evidence is mixed with regard to success in promoting emerging sectors,

<sup>78</sup> MGI (2010) How to Compete and Grow: A Sector Guide to Policy, McKinsey & Company, March

with the emphasis appearing to be on organisational and business processes as opposed to technology enabling solutions<sup>79</sup>.

Figure 40 MGI sector categorization according to degrees of differentiation and tradability



The services sector has provided the greatest contribution to economic growth, accounting for around 87% of value added and employment growth in high income countries (see Figure 41). More significantly, the services sector has provided the greatest contribution of all sectors to labour productivity (57%) in high income countries, and generated over 100% of net job growth. It has been observed that well-functioning domestic markets are important factors in determining the performance of the economy<sup>80</sup>. More importantly creating a business enabling environment and ensuring that market entry costs are low<sup>81</sup>, and that the level of law enforcement is high<sup>82</sup>, are important catalysts for entrepreneurship.

79 MGI (2002) How IT enables productivity growth, October; MGI (2010) *ibid*

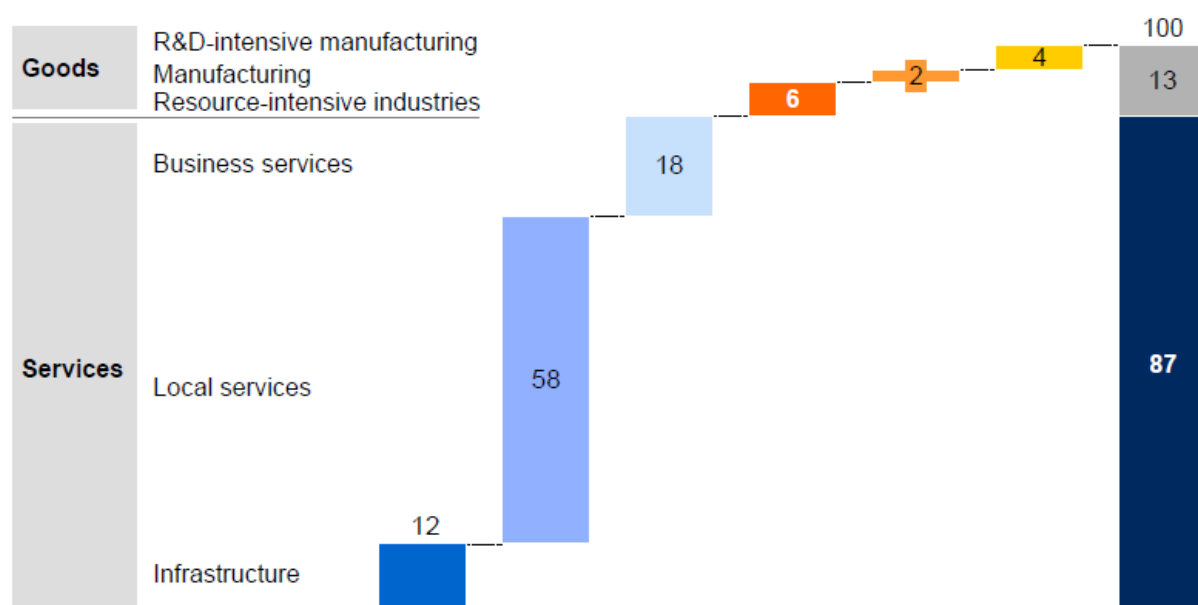
80 MGI (2010), *ibid*; Diana, F., Remes, J. & Kehoe, C. (2007) Service sector productivity: the tiger's next challenge, in *Perspectives on Irish Productivity*, Forfas, 21 March

81 Djankov, S., La Porta, R., Lopez-de-Silanes, F. & A. Shleifer (2002) The Regulation of Entry, in *Quarterly Journal of Economics*, CXVII(1), February

82 Djankov, S., La Porta, R., Lopez-de-Silanes, F. & A. Shleifer (2002) [Courts: The Lex Mundi Project](#), in [Harvard Institute of Economic Research Working Papers](#), Harvard - Institute of Economic Research, 1951



Figure 41 Sectoral contributions to economic growth in high-income countries (1985-2005)



Source: MGI (2010)

## 2. Analysis of local demand in Curacao for goods and services as well as domestic investments in productive resources

### Summary:

In this section of the report there is an examination of local demand for goods and services in Curacao (based on 2010 and 2011 data or the most recent data available). Local demand for goods in Curacao is mainly reflected by imported products because very little is produced in Curacao apart from a relatively small amount of agricultural/food products and the output of the refinery. However there are several services produced locally as reflected in the GDP data. As a result, in this analysis we will assume that the local demand for goods and services is indicated by the imported goods plus goods produced locally (from GDP) plus services (from GDP). In carrying out this exercise we will aim to identify the following:

Imported Goods + domestically produced goods (Agriculture; manufacture; electricity, gas and water)  
 + Services (Construction; Trade; Hotels and restaurants; Transport, storage and communications; Real estate, renting and business activities; Education private; Other community, social and personal service activities; Health and social work).

### Methodology

1. Compare the main categories of goods imports and rank them by size into the main categories
2. Examine locally produced goods from GDP figures and rank them by size into the main categories (compare relative contribution to GDP of Agriculture; manufacture; electricity, gas and water)

3. Examine Services from the GDP and rank them by size into their main categories (so we will compare Construction; Trade; Hotels and restaurants; Transport, storage and communications; Real estate, renting and business activities; Education private; Other community, social and personal service activities; Health and social work)

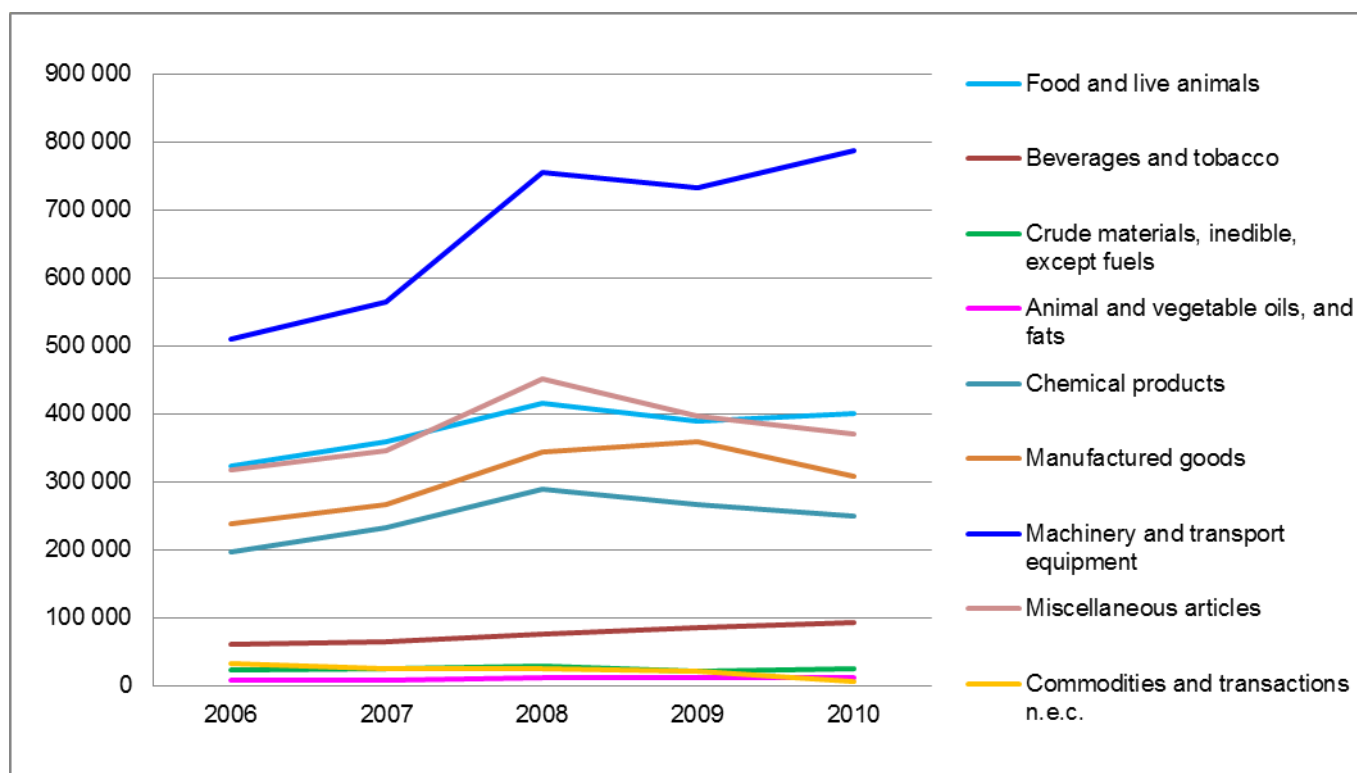
After using the above methodology, overall the main goods and services demanded in Curacao can be summarized as follows.

Goods	Services
1. Motor cars and other motor vehicles designed for the transport of persons	Construction
2. Medicaments (including veterinary medicaments)	Trade
3. Aircraft and associated equipment	Hotel and restaurants
4. Telecommunications equipment and parts	Transport, storage and communications
5. Meat and edible offal	Real estate, renting and business activities
6. Heating and cooling equipment and parts thereof	Education
7. Perfumery, cosmetic or toilet preparations	Health and social work
8. Automatic data processing machinery and units thereof	Other community, social and personal service activities
9. Furniture and parts thereof	Public administration and defence
10. Edible products and preparations	
11. Electricity, gas, and water	

#### ***a. Analysis of demand for imported goods***

For the period 2006 – 2010, Curacao's import bill fluctuated. Imports rose steadily between 2006 and 2008, increasing from NAf 1.71 billion in 2006 to NAf 2.39 billion in 2008, after which it declined slightly to NAf 2.28 billion in 2009 and further declined to NAf 2.24 billion in 2010. The decline in 2009 can be attributed to the global financial crisis which resulted in a decline in the imports across many countries.

Figure 42 Curacao Imports 2006-2010 Value in Ang. ('000)



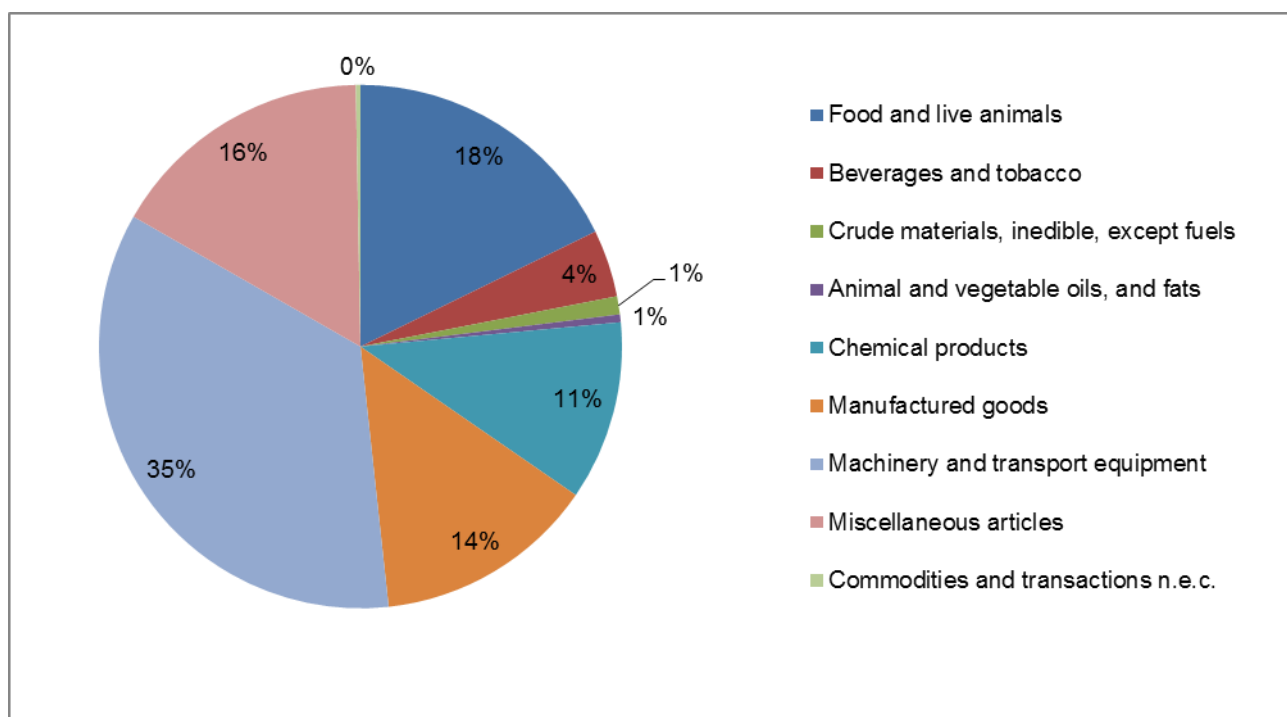
Year	2006	2007	2008	2009	2010
<b>Total Imports</b>	1,709,533	1,894,835	2,398,103	2,282,380	2,249,567

Source: Central Bureau of Statistics, Curacao

The highest proportion of Curacao's import bill for the period was accounted for by machinery and transport equipment. Imports under this category totalled NAf 786.9 million in 2010, 35% of total imports for that year (Figure 43).

Other categories of imports accounting for significant values in 2010 included: food and live animals, which valued NAf 399.5 million or 18% of total imports; miscellaneous articles which valued NAf 369.8 million or 16% of total imports; manufactured goods which valued NAf 307.7 million or 14% of total imports; and, chemicals which valued NAf 249.4 million or 11% of total imports (Figure 43).

Figure 43 Sector Percentage (%) of Imports (2010)

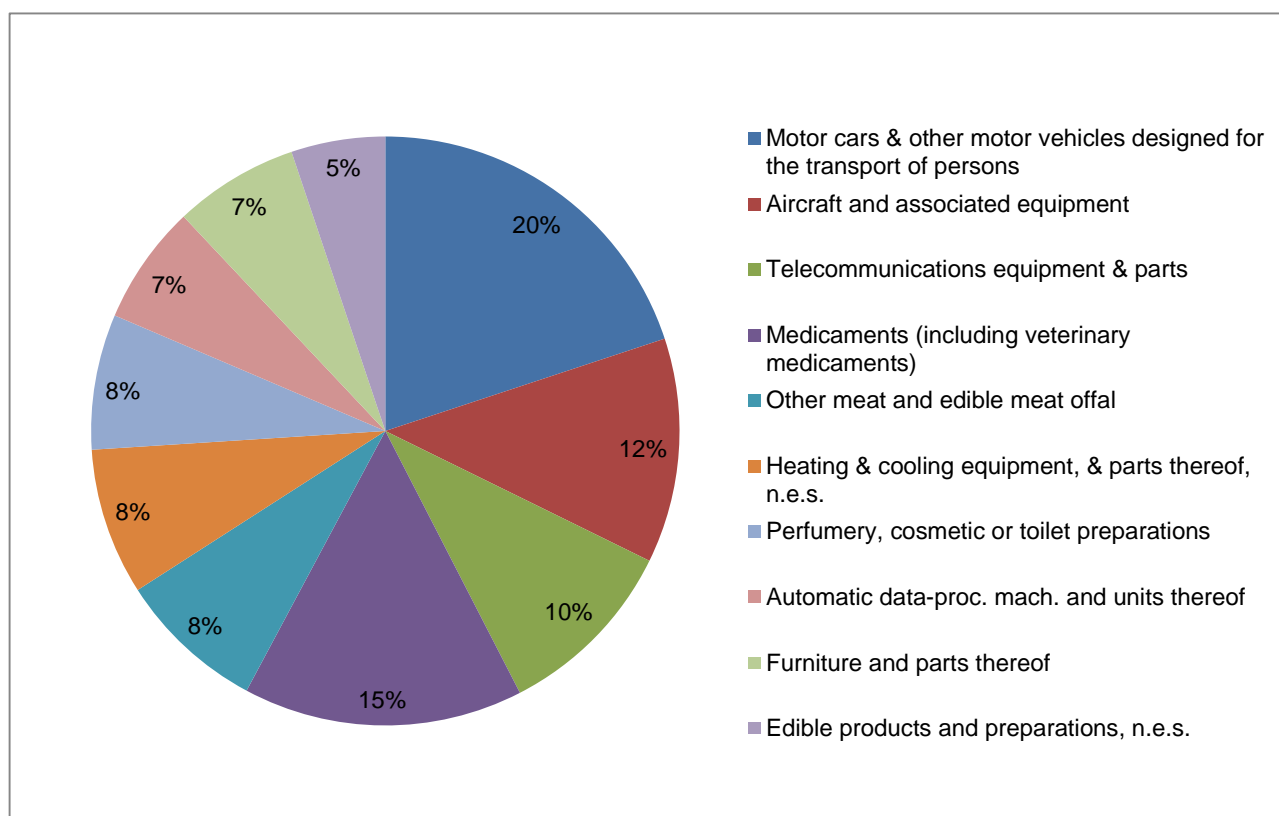


Source: Central Bureau of Statistics, Curacao

When the imports data were disaggregated further into product groups, the main imported goods demanded across categories included:

1. Motor cars and other motor vehicles designed for the transport of persons
2. Medicaments (including veterinary medicaments)
3. Aircraft and associated equipment
4. Telecommunications equipment and parts
5. Meat and edible offal
6. Heating and cooling equipment and parts thereof
7. Perfumery, cosmetic or toilet preparations
8. Automatic data processing machinery and units thereof
9. Furniture and parts thereof
10. Edible products and preparations

Figure 44 Overall Top 10 Products Imported in 2010 (Highest f Valued)



More details as well as values can be obtained from the details presented in annex B (Analysis of Imports by Category).

#### ***b. Analysis of demand for domestically produced goods and services***

This section of the analysis is based on GDP figures. It is assumed that most of the goods and services produced are to satisfy domestic demand.

Table 6 2006 - 2010 Value Added to GDP by Sector/ NAf millions

	2006	2007	2008	2009*	2010*
<b>GOODS-PRODUCING SECTOR</b>					
<b>Agriculture, fishing and mining</b>	25	27.3	32.3	32.1	32.5
<b>Manufacturing</b>	342.2	336.5	413.5	419.6	403.6
<b>Electricity, gas and water</b>	167.7	169.3	166.6	178.7	188.4
<b>Total goods producing sector</b>	<b>534.9</b>	<b>533.1</b>	<b>612.4</b>	<b>630.4</b>	<b>624.5</b>
<b>% of GDP</b>	<b>13%</b>	<b>12%</b>	<b>13%</b>	<b>13%</b>	<b>13%</b>

SERVICES SECTOR					
Construction	211.9	236.1	298	293.2	284.6
Trade	465.2	446.4	555.2	535.6	585.5
Hotels and restaurants	138.9	142.6	176.8	169.6	182.3
Transport, storage and communications	368.4	345.3	414.2	440.9	456.6
Real estate, renting and business activities	657.6	698.9	762.9	760.1	775.2
Education private	96.3	100.1	103.4	109.8	115.6
Health and social work	242.1	242.3	273.2	282.2	287.7
Other community, social and personal service activities	212.5	198	222.6	229.6	238.3
Public administration and defence; compulsory social security	310.1	322.9	334.9	355.3	391.2
Private households	11	9.7	9.6	9.9	11
Financial intermediation	829.6	998.8	898.9	904.7	939.8
<b>Total Services Sector</b>	<b>3543.6</b>	<b>3741.1</b>	<b>4049.7</b>	<b>4090.9</b>	<b>4267.8</b>
<b>% of GDP</b>	<b>87%</b>	<b>88%</b>	<b>87%</b>	<b>87%</b>	<b>87%</b>
<b>Total Value Added gross, market prices</b>	<b>4078.5</b>	<b>4274.1</b>	<b>4662.1</b>	<b>4721.2</b>	<b>4892.4</b>
<b>plus Taxes less subsidies on products</b>	<b>426.2</b>	<b>478</b>	<b>535.2</b>	<b>546.3</b>	<b>534.6</b>
<b>minus Fisim</b>	<b>105.6</b>	<b>108.1</b>	<b>125.4</b>	<b>131.8</b>	<b>144.1</b>
<b>Domestic Product gross, market prices</b>	<b>4399</b>	<b>4643</b>	<b>5071.9</b>	<b>5135.8</b>	<b>5282.9</b>
<b>nominal growth</b>	<b>4.7</b>	<b>5.5</b>	<b>9.2</b>	<b>1.3</b>	<b>2.9</b>
<b>inflation</b>	<b>3.1</b>	<b>3</b>	<b>6.9</b>	<b>1.8</b>	<b>2.8</b>
<b>real growth</b>	<b>1.5</b>	<b>2.5</b>	<b>2.2</b>	<b>-0.5</b>	<b>0.1</b>

Source: CBS

For the period 2006-2010, the average annual contribution of Curacao's goods-producing sector to GDP was 13% while services sector averaged 87% per annum.

Assuming that goods and services produced were mainly to meet domestic demand, among the goods produced 2010, the manufacturing sector consistently accounted for the largest proportion of total demand (65%) followed by electricity, gas and water (30% in 2010) and agriculture, fishing and mining which accounted for 5% (See Table 6 and Figure 45).

For that same year, among services, the demand for financial services accounted for the greatest proportion of total services (22%) followed by real estate, renting and business activities which

accounted for 18%. Other services sectors wherein notable demand was seen included trade (14% of total services demanded), and transport, storage and communications (11%).

Figure 45 Composition of Goods in GDP 2010

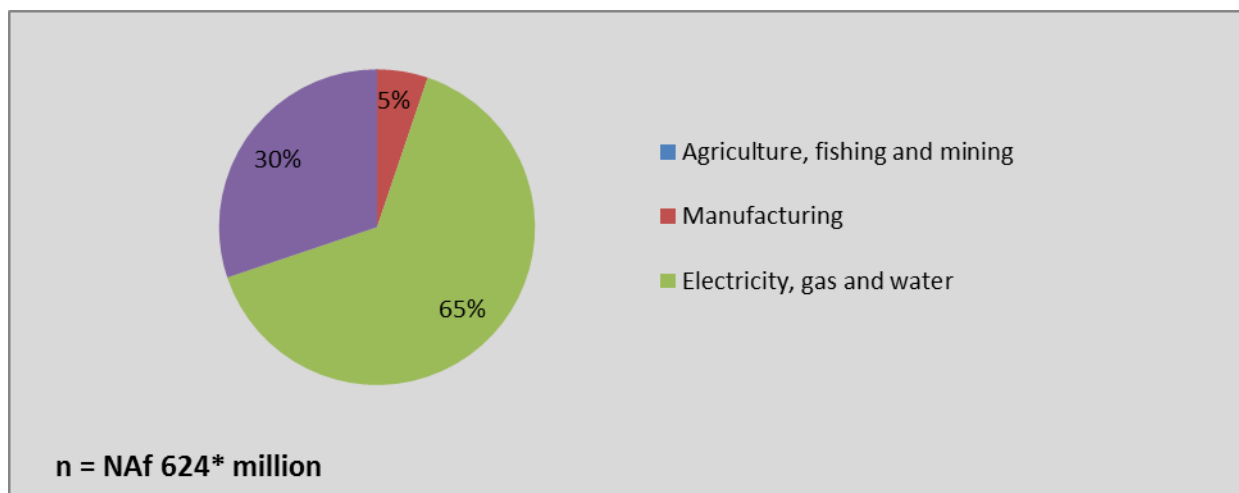
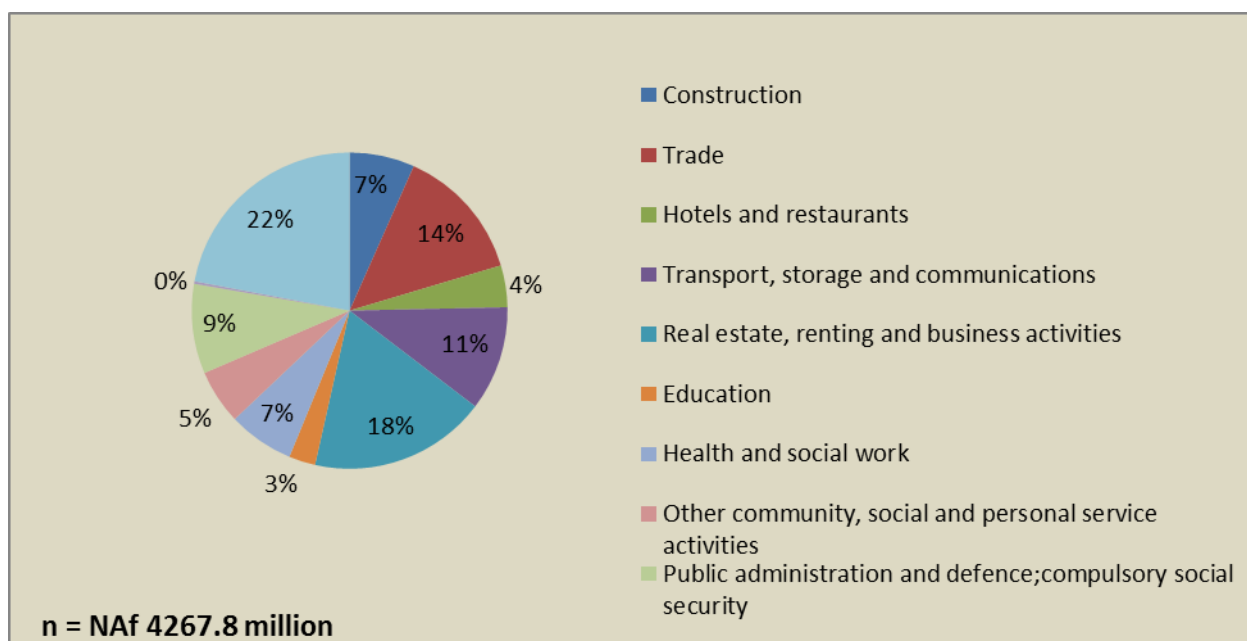


Figure 46 Composition of Services Sector in Curacao GDP 2010

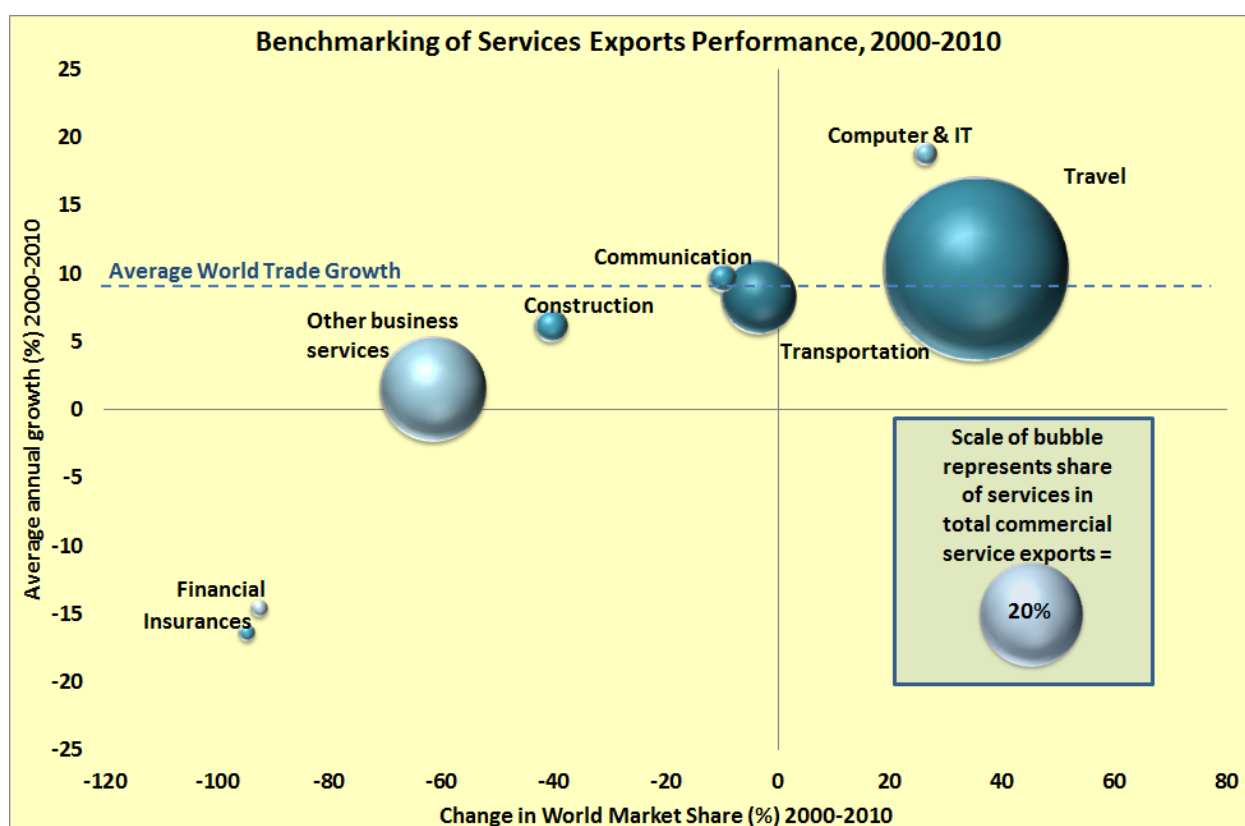


### 3. Identification of the principal economic sectors, products and services of Curacao that may be of particular interest to its current or potential future economic development by export generating sectors

This section presents a detailed analysis of the sectoral performances and potential for export of key sectors in Curacao. The analysis is based on a mix of the methodologies presented in the section 1 above and the various stakeholder consultations held by the team in Curacao during 2012.

It is important to emphasise that Curacao's performance has been particularly poor, as benchmarked against the rest of the world's performance in the same sectors. Overall, Curacao's exports of business services, other than government services, consist primarily of travel, business services (including accounting, legal and advisory services) and transportation. World trade for commercial services grew by an average 9.7% per annum between 2000 and 2010. In the Netherlands Antilles<sup>83</sup>, commercial services grew by 8.2% per annum over the same period. However, one can see that the Netherlands Antilles has lost market share in most sectors, with the exception of Computer and IT and travel services. The loss of market share in world exports is particularly acute for financial and insurance services. Overall, the Netherlands Antilles has been gaining market share in only two sectors over the last decade, namely travel and computer services (see Figure 47 below).

Figure 47 Sectoral Performance of Netherlands Antilles in Services



Note: Data for Netherlands Antilles. Data for financial services, insurance and other business services are estimations based on 2009 data.

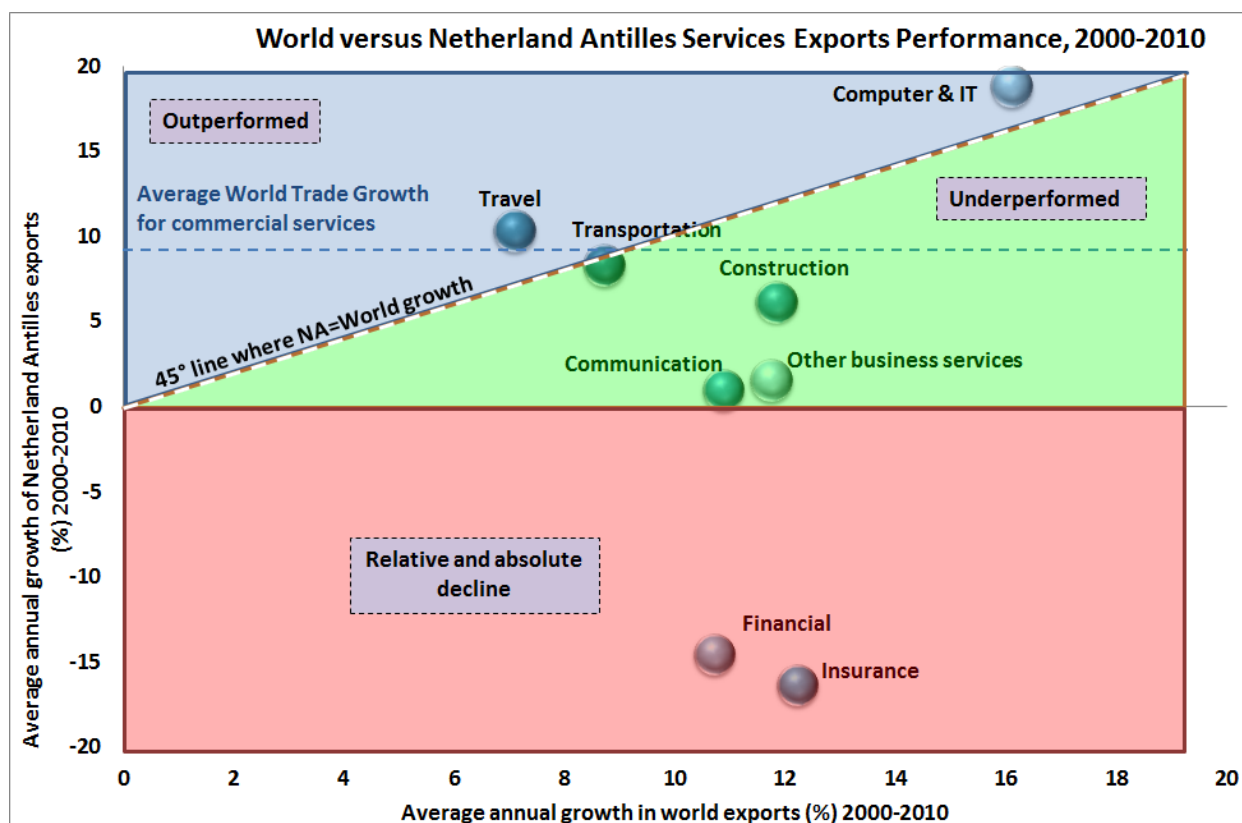
Source: Author calculations based on WTO trade statistics;

Without exception, world exports have grown in every sector of business services over the last decade. The buoyancy of service sectors provides significant opportunities for Curacao to raise economic growth prospects since Curacao is naturally well endowed to become competitive in service exports. Yet, as highlighted in Figure 48, the Netherlands Antilles has underperformed in transportation, construction, communication and other business service. Even if it has experienced some growth in these sectors, it has not grown as quickly as world growth. We subsequently present a more detailed analysis of each sector.

<sup>83</sup> Separate data for Curacao is not provided in the WTO statistics



Figure 48 World versus Netherland Antilles export growth in services, 2000-2010



#### a. Tourism development

##### Background

The traditional tourism sector is very important to the Curacao economy because of its direct contribution to GDP and employment as well as its indirect contribution to the performance of other sectors which are highly linked with it. It has grown in recent years and was predicted to continue growing despite the impact of the global financial and economic crisis.<sup>84</sup> The growth has been supported on the supply side by increased airlift from the U.S. market and the recent expansion of the international airport. The growth prospects also look favourable based on the fact that several hotels are either under construction or under development.

##### Relevance of the sector

##### - Contribution of the Tourism Industry to GDP

According to the Strategic Tourism Master Plan (STMP) for the Island of Curaçao 2010 – 2014 which was prepared in 2010,<sup>85</sup> Tourism has outperformed all other sectors by a large margin, and has

<sup>84</sup> Source: Curacao Tourist Board (2009) "Tourism Labor Market Curacao 2009-2011 Matching the Demand and Supply side"

<sup>85</sup> Source: Halcrow International Partnership July 2010) - Strategic Tourism Master Plan for the Island of Curaçao 2010 – 2014

increased its share of Gross Domestic Product (GDP) from 10.5% in 2004 to just over 18.5% in 2009, which is about equal with financial services. The Turistika Model, produced by MEO, provides slightly different estimates than the STMP showing that the contribution of tourism to GDP was 12.9% in 2004 and 17.8% in 2009 (see Table 7 below).<sup>86</sup> The Table below shows the Turistika Model's estimated value of tourism based on services rendered to tourists by each economic sector.

Table 7 Estimated Value of Tourism in All Economic Sectors (2004-2009) in Millions NAf.

Value of Tourism by Sector	2004	2005	2006	2007	2008	2009
Agriculture, fishing, mining	5.4	5.8	6.6	8.2	9.6	9.1
Food products & other manufacturing	5.6	6.0	6.8	8.5	10.1	9.6
Electricity, gas, and water supply	25.7	27.3	31.1	39.2	47.1	44.3
Construction	3.0	3.2	3.7	4.6	5.6	5.2
Trade	95.9	100.1	115.7	153.8	193.8	181.2
Hotels, restaurants, catering	184.5	196.6	223.0	276.4	326.2	307.4
Transport and communication	49.1	54.7	62.5	82.5	99.5	96.3
Financial Intermediation	71.7	76.4	87.2	110.9	133.8	126.2
Other real estate activities	26.4	28.1	32.1	41.2	50.1	47.2
Public administration and defence	22.2	23.0	25.8	36.4	45.0	42.0
Education	1.1	1.2	1.3	1.7	2.1	2.0
Health	2.0	2.1	2.3	3.2	3.9	3.7
Other services	22.4	24.0	27.7	35.1	43.2	40.6
<b>TOTAL value of Tourism</b>	<b>514.9</b>	<b>548.3</b>	<b>625.8</b>	<b>801.6</b>	<b>970.1</b>	<b>914.7</b>
<b>Gross Domestic Product, market prices</b>	<b>4 004.5</b>	<b>4 202.8</b>	<b>4 398.2</b>	<b>4 644.0</b>	<b>5 071.8</b>	<b>5 135.2</b>
<b>Tourism contribution to GDP</b>	<b>12.9%</b>	<b>13.0%</b>	<b>14.2%</b>	<b>17.3%</b>	<b>19.1%</b>	<b>17.8%</b>

Source: Turistika model, MEO (converted from US\$ to NAf. by the Consultants)

According to the STMP, tourism has been a major contributor to wealth creation, increasing standards of living and employment opportunities on the island especially as its contribution to GDP has grown in recent years.

The Master Plan also predicts that over the coming five years, tourism's contribution to economic growth, wealth creation and living standards will increase, with the sector expected to account for some 28% of GDP by 2014.

In addition to being a major driver of the economy since 2004, tourism contributes to job creation, tax revenues, and foreign exchange earnings. According to the Tourism Master Plan, tourism's impact is reflected in the following ways:

- It contributes NAf 156m to Government tax receipts which is equivalent to almost 21% of Government tax receipts
- There are about 10,200 jobs dependent directly and indirectly on the sector representing about 18% of total employment

<sup>86</sup> The CBS only produces data on Hotels, Restaurants and Catering so it does not estimate the full value of tourism.

- It contributes NAf 588 million to foreign exchange earnings representing about 16% of total foreign exchange earnings for the entire Netherlands Antilles
- It has strong linkages with other sectors of the economy especially trade, transportation services, real estate, and financial services.

In terms of strengths and opportunities of the sector the following are worth noting:

- Friendly welcoming people and staff in tourism industry
- Multilingual
- Diverse culture
- Building long-term skill base in the industry
- Initiatives in training, community-based tourism and public awareness
- Good year round climate
- Interesting reefs – drop-offs, swim-throughs, etc.
- Variety of beaches
- National parks and scenic areas
- Willemstad world heritage sites and landhuizen
- Extensive road network which is in good condition
- ‘State of the art’ airport management system
- Modern cruise terminal and mega pier
- Safe havens and moorings for yachts
- Good provision of water and power
- Plentiful accommodation
- Range of activities and attractions
- Rich cultural heritage
- Excellent port facilities for cruise ships
- Good berthing facilities for cruise ships
- Can facilitate all sizes of cruise liners
- Willemstad world heritage city a major attraction
- Easy access to city for cruise passengers

In terms of weaknesses and threats of the sector the following are worth noting:

- Shortage of trained personnel to meet growth demand
- Mismatch between pre-service training and industry needs
- Growing dependency on overseas workers may affect product character
- Rapid expansion of tourism may alienate locals due to traffic congestion, restrictions on access to amenities, etc.
- Over-supply of accommodation
- Environmental impact of growing visitor numbers
- Uncontrolled/illegal development
- Adverse impacts from tourism and recreational activities
- Social economic tension – income disparities
- Crime
- Crowding out local demand on the real estate market plus gentrification

Based on estimates provided in the STMP, the projected growth in employment in tourism over the next few years will put pressure on the labour market and on the available training resources. The rapid growth in demand for labour in tourism has already outstripped the capacity of the local labour market to supply the sector. While this growth in demand has led to a drop in the Curacao's overall unemployment it has become increasingly difficult for the sector to recruit suitably motivated and skilled staff from among the remaining pool of unemployed persons. This has manifested itself in the recruitment of foreign workers to fill positions in some hotels.

- ***Institutional, legal and regulatory framework***

There are several institutions that play important roles in Curacao's Tourism Sector such as:

- Curacao Tourist Board (CTB)
- Curaçao Hospitality and Tourism Association (CHATA).
- Curaçao Airport Partners.
- Curaçao Restaurant Association (CRA).
- Curaçao Hospitality Training Foundation.
- Downtown Management Organisation.

All the above institutions are private except for The Curaçao Tourist Board (CTB) which has the legal status of a foundation, owned and funded by the Government of Curaçao and is primarily a tourism marketing organization. The Strategic Tourism Master Plan (STMP) recommends that, given its importance, the CTB's 'marketing' and 'product development' roles will need to be enhanced if the objectives of this STMP are to be achieved. The areas requiring strengthening include:

- New product development (e.g. MICE, yachting, etc.).
- Sustainability practices.
- Quality assurance.
- Air access transport.
- Market intelligence/research.
- Web-site development.

A key institution on the private sector side is the Curaçao Hospitality and Tourism Association (CHATA) which is the representative organization for the hospitality and tourism industry in Curaçao. Its membership includes hotels and apartments, airlines, car rentals, restaurants, tour operators, dive operators, destination management companies and a wide range of other tourism related businesses.

CHATA's purpose is to provide a forum, promote cooperation and assist in promoting business for its members; foster goodwill towards the tourism industry; encourage fair and harmonious labour relations; support human resource development in tourism; and advocate legislation beneficial to the tourism industry. Its long-range goals are (a) to be the unifying force for the hospitality and tourism industry; and (b) to be the proactive public policy advocate for creating a favourable business environment for the hospitality and tourism industry.

#### - ***Legislation and Incentives***

There are many pieces of legislation which have an impact on tourism but which are not specifically enacted for the benefit of tourism alone. These include laws in such areas as taxation, customs and immigrations, transport, public safety, health environment and planning etc. As would be expected, legislation in these fields is the responsibility of the relevant departments and not of the department responsible for tourism. However, it is appropriate that the tourism sector should have a consultative input into those aspects of legislation in other fields which impact on tourism.

The incentives available for investment in hotel projects are currently as follows:

- Exemption from import duties on construction materials, and initial furnishing of premises.
- Exemption from land tax for first ten years of operation.
- Exemption from land occupancy tax first ten years operation.
- Exemption from personal income tax on income earned from dividends and profit distributions within two years after the fiscal year in which the profit was first obtained.
- Accelerated capital depreciation allowance.
- Low rate of corporate profit tax (2%) for up to 11 years.
- Sliding scale of ground rent over 10 years on Government owned land.

- Exemption from 7% room tax for international hotel chains for 5 years.

- ***Trends and Outlook***

According to the STMP, which was completed two years ago, over the next few years, tourism's contribution to economic growth, wealth creation and living standards is projected to increase, with the sector expected to account for some 28% of GDP by 2014.

- ***Current plans, policies and regulations***

The plans for the Tourism sector are guided by the STMP, which is a very detailed and comprehensive document which examines the various components of the tourism sector and outlines what needs to be done to achieve sustainable sector growth and development. It provides different growth scenarios depending on whether a high to low growth programme is adopted.

### **Evaluation of the Tourism Sector in Terms of Potential for Growth**

As mentioned above, the Tourism sector has grown rapidly in recent years and is now a significant contributor to growth and employment creation in Curacao. The following provides a more rigorous framework of analysis which examines its growth potential in terms of Sector capacity, Macroeconomic contribution, Export readiness, Cluster potential, Linkages with other sectors, International marketing potential, Environmental impact, and Socioeconomic impact.

*Table 8      Sector Capacity using the 6Ms Model – Traditional Tourism Services*

<b>Criteria</b>	<b>Overall Rating</b>	<b>Comments</b>
Manpower	Average	<p>The sector is highly labour intensive and dependent on the right mix of skills and competence. Though there are qualified and skilled persons working at international standards at all levels of the sector, there are reported shortages of appropriately skilled labour in most levels. There are labour market constraints in that the training institutions are not resourced and oriented to produce the required number of skilled workers. As a result in some managerial as well as other positions (such as bar staff), manpower is recruited from overseas.</p> <p>The supply of labour constraint is an area of major concern if the sector is to grow healthily.</p>

Means	High	The sector is well capitalized and has attracted a substantial amount of investment in recent years. It is well supported by CTB, CHATA and other BSOs.
Methods	High	The sector has good management and support systems
Machines	High	The sector uses state of the art equipment and technologies. Even though some of the smaller properties may require technological upgrades
Measurables	High	In response to increased demand, the sector has been growing, hiring more staff and is has been quite profitable.
Marketing	Low	This low rating is due to the fact that the STMP has not been fully implemented, the impact of the global recession, and the intense international rivalry amongst destinations for tourists.

Table 9 Summary of Growth Potential: Traditional Tourism Services

Criteria	Rating	Justification
Macroeconomic contribution	Very High	The Sector contributes in a significant way to foreign exchange earnings, GDP, GDP growth and fiscal revenues and has the potential to continue doing so.
Export readiness	Medium-High	Curacao has several hotels that are export ready in that they offer a product of international quality. However, Curacao faces an international market that is very competitive in terms of price, variety and quality.
Cluster potential	High	The nature of the industry, its inter-relatedness with other industries and its support from the CTB, CHATA and other BSOs gives it strong cluster potential, which will certainly contribute to growth.
Linkages with other sectors	Very High	The sector is highly connected with other sectors such as transportation, retail, agriculture, and financial services. As a result there are numerous secondary benefits.
International marketing potential	Medium	Given the natural growth of the international travel industry, the increase in domestic accommodation offers, and the increased efforts of BSOs such as CTB, CHATA,

		etc; the growth prospects from international marketing are quite good. This includes opportunities in the region such as Venezuela, Colombia and other Caribbean islands.
Environmental impact	Medium	Despite the increased awareness of the sector in terms of the environment, hotels typically use high levels of electricity generated by fossil fuels even though this is declining as the Government embarks on electricity generation using wind farms and other forms of renewable energy. To the extent that their activities result in water pollution this may also contribute to the destruction of the very important coral reefs. Given their location, many hotels and attractions are vulnerable to climate change and rising sea levels. In addition they sometimes contribute to problems in terms of inadequate disposal of solid waste as well as sewage.
Socioeconomic impact	High	The sector contributes in a significant way to job creation and income generation. The sector contributes to the reduction of gender imbalance in the work force as a significant number of employees are female. Some activities and programmes are located in communities and thereby contribute directly to community and youth development. Even though there are concerns about the impact of the sector on the local real estate market in terms of prices and “crowding out” of local demand, above factors should enable the sector to continue being a major contributor to growth.

### Conclusions

The Tourism sector is very important to the economy of Curacao in terms of contribution to GDP, foreign exchange earnings, employment creation, and fiscal revenues. The industry is well supported by state owned and private sector BSOs and is a critical pillar of the economy. The sector has displayed a positive growth trend in recent years and has been a major contributor to the increased employment level in Curacao. The tourism sector is very important in that it is highly connected to other sectors some of which are highly dependent on its success. In terms of environmental impact, continued efforts are required to make the sector less dependent on fossil fuels; reduce the sectors



negative impact on natural resources such as the coral reefs; and to render it less vulnerable to climate change.

The Tourism sector should definitely be targeted as a growth sector. Policies and strategies such as those included in the STMP must be implemented to foster the development and produce sustained growth in the sector. However, the recommendations of the STMP must be rechecked and implemented with care especially in light of the fact that greater dependence on tourism will increase Curacao's external vulnerability. Furthermore, on the supply-side, in implementing aspects of the STMP, it will be important to examine labour market constraints given the shortage of well-trained labour in certain frontline positions, such as bartenders. There is evidence of this shortage of appropriately trained workers at the (relatively new) Hyatt Hotel where many frontline positions have been filled by Filipinos. On the demand side, it is important that there is an adequate tourism marketing budget in order to attract the level of visitors required to generate the desired rate of return on investment and economic growth. This situation is compounded by a) the adverse impact of unfavourable global economic conditions on tourism, and b) the tight fiscal constraints in Curacao that will restrict the amount of public sector funds available for tourism marketing at the national level.

Other considerations that need to be carefully examined in the implementation of the STMP are related to physical planning in order to guide properly the location and construction of tourism properties. From an environmental perspective, it is critical to preserve the reefs and beaches, which are integral to sustainable growth and development in tourism. It is also important that tourism development is carried out with sensitivity to residential construction in order to prevent the crowding out of residential development due to shortage of supply and/or driving up of property prices. Finally, a keen eye must be kept on the adequacy of airlift required to support and drive the tourism industry.

#### ***b. Cultural and Creative Industries***

##### **Background**

*The change in thinking about the role of culture and the creative industries in the development of the region has both influenced and been fuelled by changes in international development thinking on culture. There is an increasing acknowledgement on the part of international agencies that the creative industries are important to development, to global cultural diversity and to small island developing states.<sup>87</sup>*

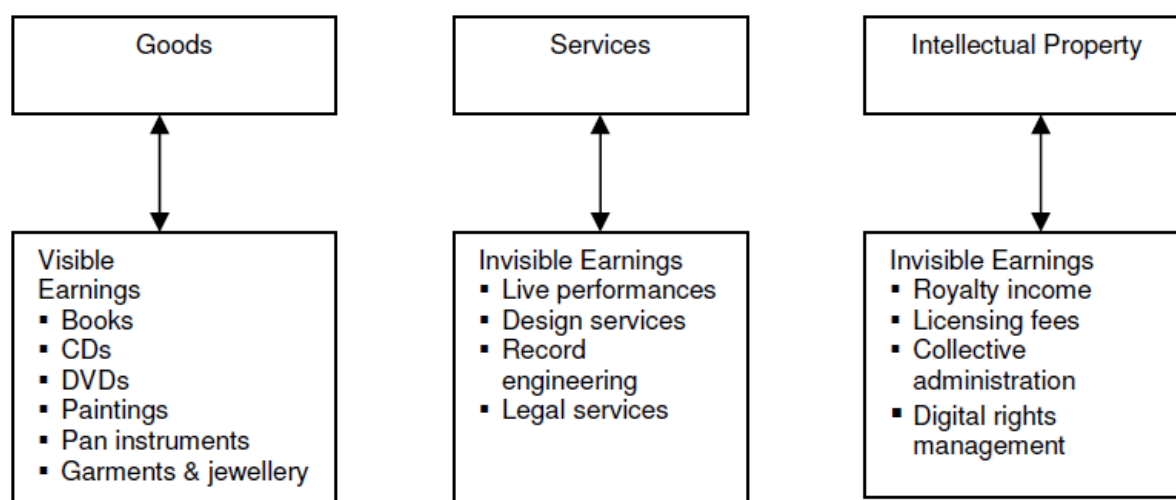
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<sup>87</sup>ACP cultures - WIPO-CARICOM MEETING OF EXPERTS ON THE CREATIVE INDUSTRIES AND INTELLECTUAL PROPERTY

Cultural industries can indeed provide an important avenue for socioeconomic-development through the generation of revenues, employment, and linkages to other sectors. The Cultural and Creative Industries (CCIs) regroup a wide array of industries. These have been defined to include activities surrounding (i) artistic and monumental heritage; (ii) archives; (iii) libraries; (iv) books and press; (v) visual arts; (vi) architecture; (vii) performing arts; (viii) audio and audiovisual media/multimedia)<sup>88</sup>. These areas of CCIs can be divided into functions, which are (1) preservation, (2) creation, (3) production, (4) dissemination, (5) trade/sales, (6) education. Each of these functions serve a particular purpose for society and can be either income generating or underpinned by other non-monetary considerations.

Estimating the contribution of CCIs to the economy is difficult owing to a host of difficulties in measuring the exact nature of cultural industries. Various layers of information are required, particularly if second round and indirect contribution effects are to be measured. Moreover, often such activities, like other invisible earnings, go unrecorded and are sometimes undeclared. Figure 49 shows the different stream of revenue which can be derived from CCIs in the form of visible (goods) earnings and invisible (services) earnings. As the degree of technological innovation comes to embody CCIs, then the level of invisible (services) earnings increases.

Figure 49 Income Streams from CCIs



Source: Nurse, K. et al (2007) *The Cultural Industries in CARICOM: Trade and Development Challenges*, CRNM Report, December

A detailed study on the contribution of CCIs in the CARICOM market details subsectors within the cultural industries<sup>89</sup>. The major subsectors for Curacao are reviewed individually below, with worldwide data provided where available.

**Music** - The music and dance of Curacao has been influenced by various genres of the Latin American and Caribbean continent. It includes strands of merengue, salsa, and cha-cha-cha, and calypso and reggae, together with rhythms from Africa and Papimient language. The music industry worldwide is significant. The music industry is one of the largest cultural industries and makes a

<sup>88</sup> Eurostat (2011) *Cultural Statistics 2011 Edition*, Luxembourg

<sup>89</sup> Nurse, K. et al (2007) *The Cultural Industries in CARICOM : Trade and Development Challenges*, CRNM Report, December

significant contribution to the world-economy. Trade revenue generated by the global recorded music industry however dropped in 2011 by 3% to \$16.6 billion<sup>90</sup> Physical format sales slumped by 8.7% globally, falling from a trade value of \$11.1 billion in 2010 to \$10.2 billion in 2011.

Meanwhile, global digital revenues saw growth of 8.0%, rising from \$4.84 billion in 2010 to \$5.23 billion last year, accounting for 31% of overall recorded music revenues. Global performance rights revenues also grew, climbing 4.9% globally, to \$905 million.

In the global rankings, the U.S. retained the top position with sales remaining flat in value terms totaling \$4.37 billion. Japan, the second biggest global music market, recorded a 7% decline in trade revenues to \$4.09 billion. Germany comes third with revenues totaling \$1.47 billion in 2011.

Looking at the regional industry, the Caribbean enjoys a competitive capability in musical production. The region's contribution to the global cultural economy, particularly popular music, has been very significant. The rapid growth of an intellectual property and copyright economy, also suggests that there is a window of opportunity in the realm of music industries for Caribbean economies.

The level of penetration of the global market has however been small and sporadic. As such the economic potential of the Caribbean music industry remains under-developed.<sup>91</sup> There is no officially available data for the sale of music produced in Curacao.

**Publishing** - Publishing is the second largest creative industry in the world, after television; and is currently bigger than the music publishing; video games and entertainment software; and audiovisuals (DVDs and downloads) industries combined.

The global publishing market grew by 1.3% in 2011 to reach a value of \$244.4 billion and is expected to have a value of \$273 billion in 2016, an increase of 11.7% since 2011.<sup>92</sup>

Looking at the industry sub-sectors, books remains the largest segment of the global publishing market, accounting for 36.9% of the market's total value, Europe accounting for 37.9% of the global publishing market value. A major limitation for the Caribbean publishing industry as a whole is that it is small, underdeveloped, undercapitalized and shallow in terms of the availability of skilled and experienced human resources. On-line publishing would overcome some of the scale economy limitations that Curacao can face, although it requires integration into the large global on-line services.

**Visual Arts** – Curacao has experienced some growth in the number of art galleries on the island. It has also been noted that Curacao artists participate regularly in international art events. During stakeholder consultations, a virtual and physically present art gallery were consulted. The global visual arts market is weighted heavily in favour of the developed and metropolitan markets of Europe, North America, and the emerging economies of East Asia. The visual arts sector in the Caribbean is considered to be very small and largely neglected in the industrial and trade policy arena. The visual

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<sup>90</sup> International Federation of the Phonographic Industry's (IFPI)

<sup>91</sup> *The Cultural Industries in CARICOM: Trade and Development Challenges*, Caribbean Regional Negotiating Machinery, November 2006 (revised December 2007)

<sup>92</sup> Market Line, "Publishing: Global Industry Guide" March 2012

arts sector in the Caribbean has largely developed on the basis of individual initiative and entrepreneurship with minimal intervention of governmental authority.

**Fashion** - Curacao's fashion scene is quite diverse and attracts other Caribbean islands during the Curacao Fashion Week, when some of fashion's leading designers, retailers and stylists showcase their work.

**Performing Arts** - Danzarte Studio is famous for the performing art on the island of Curacao. Curacao also has various dance companies and schools, such as the 'Ballet Kontemporaneo di Kòrsou', "Ballet En Dansschool", Muziekakademie Cultureel Centrum Curaçao, and the Ecole de Danse N.V. The global performing arts industry, comprising theatre, opera, dance, ballet is worth over US\$40 billion in box office revenues. The largest market is the US (US\$7 billion). Other important markets are the EU (especially France and the UK).

Performing arts represent considerable income potential for the Caribbean region and its cultural dynamism. However, while music has proven its ability to be self-sustaining with limited or no help from the private sector or Government, the performing arts disciplines often require subsidies to survive. Income for the performing arts sector is indeed generated primarily through earned income since few mechanisms exist to fund operating or programming expenses through corporate, foundation, or government grants or subsidies.<sup>93</sup>

Festivals are also an effective means to bolster cultural confidence and regional integration, and represent considerable income generation and cross linking to other sectors of the economy. They are effective for destination branding and cultural industry development. Caribbean festivals make a significant impact on the regional tourism sector in terms of creating a new tourism season and/or filling the void in the tourism calendar by boosting airlifts and improving hotel occupancy levels (countries like Barbados and St. Lucia have developed what can be described as a festival tourism strategy).

The best case is that of Trinidad Carnival, the largest festival in the region in terms of visitor arrivals and expenditures: arrivals have grown by 60 percent since the late 1990s, such that by 2004 there were over 40,000 visitors who spent approximately US\$27.5 million, over 10 percent of annual visitor expenditures.<sup>94</sup>

**Craft** - The world market for handicraft products is estimated at US\$40 billion annually<sup>95</sup>. The largest exporters of craft items are China and India, who produce crafts on a large scale and employ tens of thousands of artisans. Curacao has an elaborate assortment of locally handcrafted souvenirs which are sold in souvenir shops and for cruise tourists. There is no data available of exports for Curacao, nor the contribution of the craft sector to national income.

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<sup>93</sup> United Nations / ECLAC CARIBBEAN DEVELOPMENT REPORT Volume I, 21 December 2007

<sup>94</sup> *The Cultural Industries in CARICOM: Trade and Development Challenges*, Caribbean Regional Negotiating Machinery, November 2006 (revised December 2007)

<sup>95</sup> USTR Data, quoted in Penna, F. J. & C. J. Visser (2002) Cultural Industries and Intellectual Property Rights, in Hoekmann et al (eds) Development, Trade, and the WTO: a Handbook, World Bank

### ***Relevance of Cultural and Creative Industries in Curacao***

A dearth of statistical data makes any analysis of the cultural and creative industries almost impossible. CCIs are however an integral fabric of the make-up of Curacao and cultural presentation and diversity is a recognised necessity in devising country development strategies. CCI have been incorporated as a special chapter in the Economic Partnership Agreements between the EU and CARIFORUM Member States precisely because both regions recognised the importance of promotion and preservation of Caribbean cultural industries.

### **Evaluation of the Cultural Industries Sector in Terms of Potential for Growth**

In terms of sustainability, there are great opportunities that Curacao could capitalize on. One of the principal difficulties seem linked to the institutional framework for supporting cultural industries. Public funding of social programmes is reported by stakeholders to be limited, and there is insufficient support to emerging artists to promote their talent, market it overseas, protect its copyrights and assist in the management of events/exhibitions/concerts for such emerging artists. At present, many events are primarily geared to the local population, with few visitors coming from outside the Netherland Antilles. Carnival is perhaps the most international event held in Curacao, although this faces competition from other carnivals in the Caribbean.

Curacao enjoys UNESCO recognition as a World Heritage Site, making it only one of 17 sites in the Caribbean recognized by UNESCO in the Caribbean. Curacao's real strengths is its rich cultural heritage which gives it the potential to really stand out as a distinctive destination in the Caribbean. The cultural infrastructure has developed over the past decades, through its museums, galleries, publications, research, international conferences held locally, Kas di Kultura, Museo Tula and private galleries.

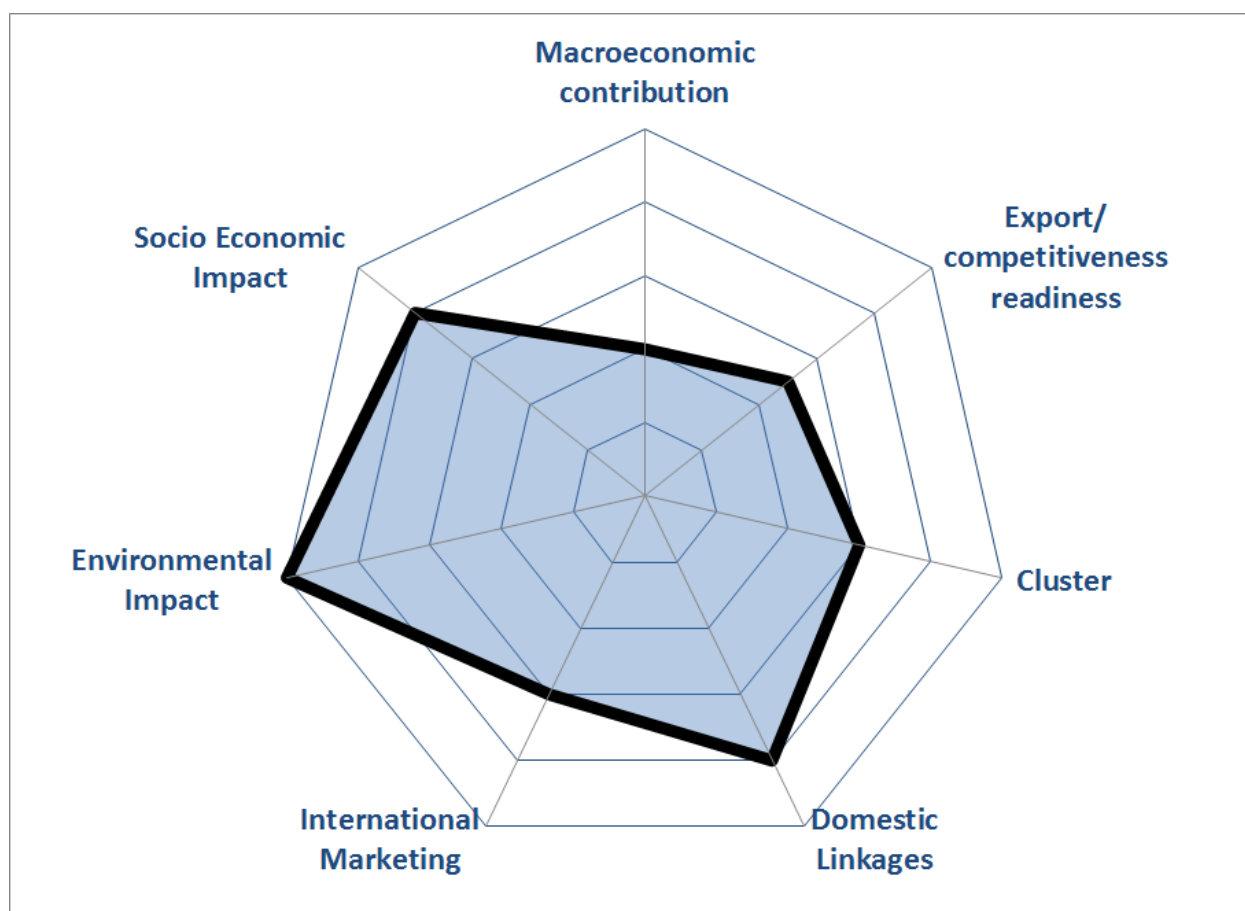
Cultural tourists are an attractive market segment, tending to be mid to upper income earners, good spenders, well educated, frequent travelers, and mostly independent tourists. Key drivers for cultural tourism are cultural attractions, museums, historical architecture, landscapes, music and the art scene.

There are several opportunities in Curacao, in fact the essential platform of cultural heritage attractions already exists and should be capitalized in every possible way. There are attractions that need to be fully integrated with the surroundings as well as with national interpretative and promotional strategies.

Based on discussions with stakeholders and on information from other islands, it would appear that the macroeconomic contribution is currently quite limited. Owing to the non-existence of data on employment, income and international trade in this sector, it is difficult to measure. It has many indirect effects however, such as attracting tourism, restaurant business and other services. Apart from the carnival and increasingly international Curacao Fashion Week, it does not appear that Curacao is strongly outward oriented and it does not appear as export ready as other Caribbean islands. There is however strong competition within the region and flights to Curacao remain limited in comparison to

other destinations. Some supporting institutions exist but they need to organise more events and have better support from the public sector. There are strong linkages with other industries in Curacao, such as the cruise industry, transport, restaurants and hotels, and financial industry. The international market has been affected by the global financial crisis and regional demand is relatively limited owing to the similarity of products and service. There are important social impacts expected from supporting the cultural industries, not least amongst more disadvantaged households. The perceptions gathered from stakeholders have been incorporated into the figure below, and indicate that the strengths of the cultural industry are particularly skewed towards its positive impact on socio-economic indicators and the fact that there are few environmental effects

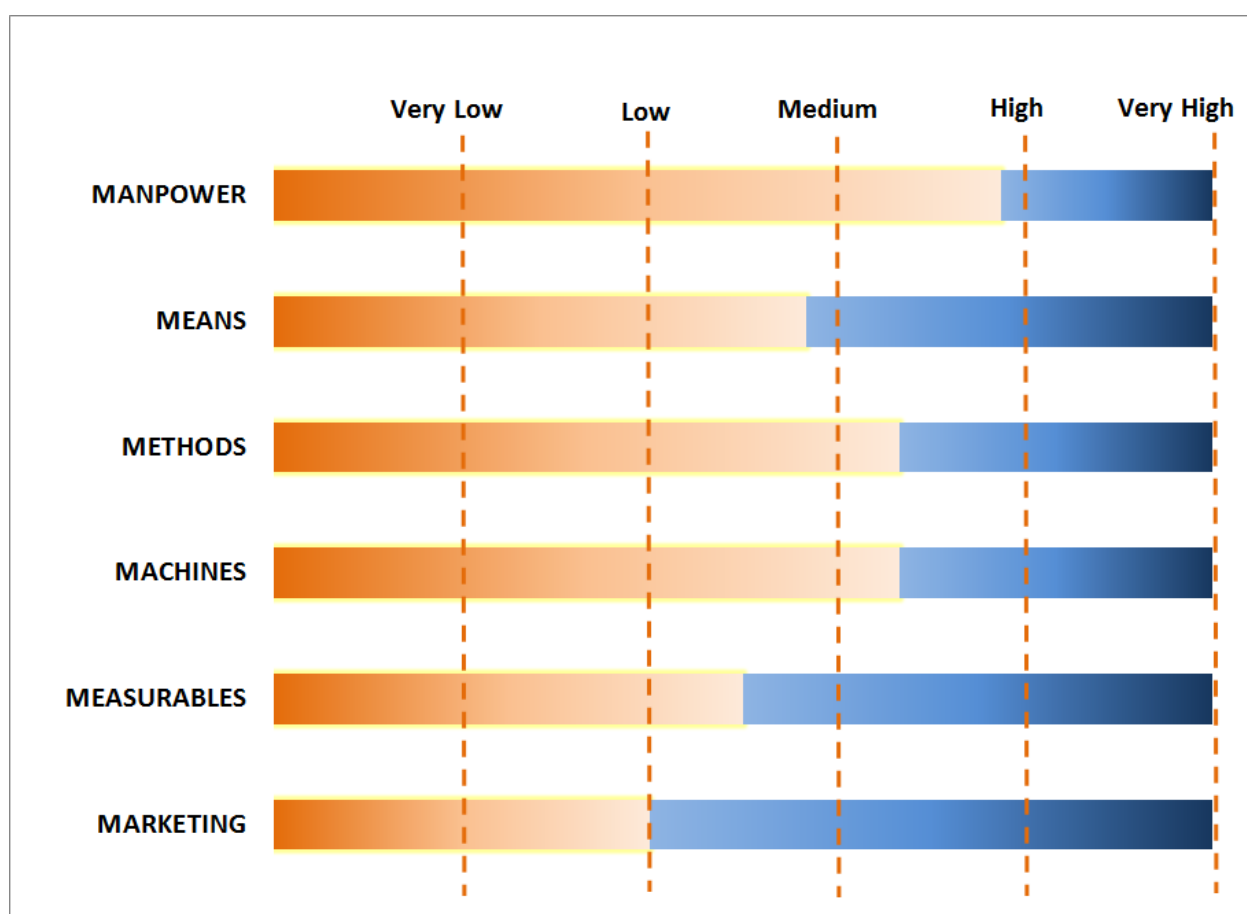
Figure 50 Stakeholder perceptions: Positive Impact of the Cultural industry



The main institutions in cultural and creative industries in Curacao are the Council for Culture and the Arts, Film Commission, Crafts Council; National Book Council and a private music association and artists association. There is no art school in Curacao, which would be required if technique, quality and knowledge on running a business is provided to artists. There is no craft market in Curacao and based on discussions with the stakeholders in Curacao, government support is required to develop the local craft industry so that craft does not have to be imported (currently Chinese imports are used). In terms of policy support, however, it should be noted that in 2012, the Ministry of Economic Development in close cooperation with the UNESCO section from the Ministry of Education, Science, Culture and

Sports implemented a project implying the selection of a local handicraft to participate in an Award program from UNESCO for Caribbean region. The goal of the program is to encourage craft-workers to use traditional skills and materials so as to ensure the perpetuation of traditional knowledge and to preserve cultural diversity. It is also set up with the goal of setting quality standards for handicrafts and raising international awareness of handicraft products, in order to enlarge and strengthen the market for these products. Nevertheless, the indigenous craft industry is suffering because there is no education and other support for the industry. It was reported that the sourcing of some raw materials can be difficult and import duties are high for some of the tools used by artists. There is no national plan for cultural industries and no indicators to evaluate the trends and performance over time. The results are portrayed in the Figure 51 below.

Figure 51 Relative Capacities and Challenges faced by the Cultural Sector



### Summary of Growth Potential for Cultural and Creative Industries

According to UNESCO, the five principal drivers for promoting and preserving CCIs<sup>96</sup> are: (i) Social Organization and Values; (ii) Human Resources Development; (iii) Cultural Asset Management; (iv) Technological Development; and (v) Infrastructure and Policy Environment. Curacao benefits to a

<sup>96</sup> UNESCO (2007) Statistics on Cultural Industries: Framework for the Elaboration of National Data Capacity Building Projects, Bangkok

certain degree from cultural asset management but is weaker in all other drivers highlighted by UNESCO. In particular, it needs to focus on education and social policies, as well as regulatory and legal frameworks, financial assistance and to a lesser extent physical infrastructure.

Cultural industries could be more actively promoted to tourists but also given a greater window internationally, through innovative virtual channels. Curacao's multicultural environment and linguistic environment play in its favour.

Key weaknesses in Curacao include the following elements:

- Distribution is limited because it is difficult to compete with products from China
  - There is a private local craft market but no public craft market place
  - All promotion has to be done by private sector with no public sector support
- Need to develop synergies with tourism industry

Key recommendations include:

- Establishing training institutions
- Deliver entrepreneurial training
- Provide coaching to young artists
- Sources of donor funding, including UNESCO should be examined
- Starting with schools, visiting galleries and get a better appreciation of local culture should be introduced in the curricular.
- North Sea Jazz has become popular and a film festival has been established and this could benefit from public sector support.

### ***c. Financial services***

#### ***Background***

The financial services sector is very important to the Curacao economy because of its direct contribution to GDP and employment as well as its indirect contribution to the performance of other sectors which rely on it for funding and other forms of financial services.

#### ***- Domestic Financial Services***

Curacao has a well-developed traditional Domestic financial services sector (including Merchant Banks, Credit Unions, Insurance Companies, Trust Companies, etc.), which provide traditional financial services that are globally available. The Domestic financial sector is well regulated and has



been stable over the years and meets international standards in terms of capital adequacy, loans to deposit ratio, and performing loans.<sup>97</sup>

#### - **International Financial Services**

Curacao's Offshore Financial Institutions specialize in: International banking, (tax) law, insurance services, maritime registry services, fund management companies. These institutions engage in advisory and consulting services to clients on all aspects of business, legal affairs, financial management, logistics and technological issues. During the 1970s and 1980s, the International Financial Services sector developed rapidly in Curacao and became a major growth pole in the economy. However, the stringent positions taken by the OECD combined with the effects of the global financial crisis has adversely impacted the international financial services industry (sometimes referred to as International industry) in recent years resulting in negative trends in its performance and contribution to GDP.

It is felt by players in the industry<sup>98</sup> that with minimal policy changes by the Government, including the enactment of legislation that has been drafted already, that International Financial Services could start making a meaningful comeback.

#### **Relevance of the sector**

##### - **Contribution of the Financial Services Industry to GDP**

The table below shows the contribution of financial services to the GDP of Curacao. It reflects the significance of financial services to the economy in that over the period 2006-2010 it contributed about 19% in each year. A recent study estimated that the International Financial Services sector contributed about 8% of GDP,<sup>99</sup> however given the recent decline in the International sector this may require updating. The steady contribution to GDP of the Financial Services industry reflects the robustness of the sector overall.

Table 10 Gross Domestic Product (GDP) by sector and industry (mln ANG)

	2006	2007	2008	2009	2010
Financial services	851.8	895.2	976.2	981.8	768.1
<b>Domestic Product gross, market prices</b>	<b>4,398.1</b>	<b>4,644.0</b>	<b>5,073.7</b>	<b>5,138.6</b>	<b>5,282.9</b>
Financial Intermediation as % GDP	19%	19%	19%	19%	15%

Source: CBS Curacao

<sup>97</sup> Based on the most recent IMF Country Study

<sup>98</sup> These opinions were expressed during sector consultations.

<sup>99</sup> Source: Schipke, A. (2011) International Financial Centres: Opportunities and Challenges for the Caribbean, Presentation at Conference on Economic Growth, Development and Macroeconomic Policy, Jan; CIFIC (2011) Draft Strategic Plan for the period 2011-14, April

### - **Employment in Financial Services Sector**

The table below shows that employment in the financial services sector remained at a steady 7% of total employment over the period 2007-2009. A recent study suggests that the International Financial Sector employed 1,600 persons<sup>100</sup> which is about 38% of employment in the financial services sector as a whole.

Given that wages are higher on average than in other sectors, the financial sector has minimal problems recruiting local staff with the requisite skills and competencies. Worker productivity is relatively high in the financial sector as reflected by the fact that the sector contributes twice as much to GDP as it does to employment. As a result it can be inferred that the sector is a significant contributor to fiscal revenues.

Table 11 *Employed Population by Economic Activity*

	2007	2008	2009
Financial Services	3971	4188	4132
<b>Total</b>	<b>54,049</b>	<b>56,535</b>	<b>56,582</b>
Financial services employment as % Total	7%	7%	7%

Source: CBS Curacao

### - **Institutional, legal and regulatory framework**

The financial services industry is regulated by the Central Bank of Curacao and St. Maarten based on a set of statutes designed for each type of institution that it regulates. The Domestic Financial sub-Sector comprises numerous banks, trust companies, credit unions, insurance companies, and insurance companies.

CIFA (Curaçao International Financial Services Association) is the representative association of professionals in the international financial services sector of the Netherlands Antilles and provides advisory services to government, regulatory agencies, and monetary authorities on issues concerning the international financial services sector. CIFA participates in the development of new products and services by advocating for new state-of-the-art laws and regulations (fiscal, corporate and compliance). CIFA has more than 100 members including: international banks, civil law notaries, law firms, tax advisers, company management, fund services and insurance companies.

### - **Trends and Outlook**

100 Source: Schipke, A. (2011) International Financial Centres: Opportunities and Challenges for the Caribbean, Presentation at Conference on Economic Growth, Development and Macroeconomic Policy, Jan; CIFIC (2011) Draft Strategic Plan for the period 2011-14, April

As the earlier data reveal, the financial sector has contributed significantly to the economy of Curacao in recent years. The trends and outlook for the Domestic Financial Sector are quite stable given that it operates conservatively in a well regulated environment. The International Financial Sector is not showing the same positive trends and has been on the decline since 2000. The downward trends have persisted and will require the appropriate policies, legislation, and collaboration between the public and private sector to change the negative trend.

- ***Current plans, policies and regulations***

The Domestic financial services sector is governed by strict laws, policies and procedures which are monitored and enforced by the relevant regulatory agencies. The Central Bank of the Netherlands Antilles has the supervisory responsibility for the Banking Sector in Curacao. As a result, the future for this sub-sector should be stable and predictable because players are able to position themselves and minimize risk regardless of the local or international economic situation. It is important that the Government continues to create an environment that is conducive to the thriving of this sub-sector given its contribution to GDP, employment, funding of other industries, and deposit taking function. In the IMF Report 2011, data revealed that Curacao has performed quite well amongst its Caribbean partners in terms of capital adequacy, return on assets, non-performing loans, loan loss provisions and bank lending spreads.

The International financial services sector is also guided by domestic and international rules, however its continued success depends on its ability to be innovative and create new products that appeal to different niche markets around the world. It is still identified by many as one of the industries with the greatest prospects for contributing to the future growth of the economy. It is therefore important that the Government creates a policy environment and a legislative infrastructure to allow the industry to be creative while meeting prudential requirements. Important measures that need to be taken by the policy makers to stimulate growth in this sub-sector include:

- Creating more incentives to attract international banks and investors,
- Expanding the current number of tax treaties
- Signing more double tax treaties
- Giving priority to making and implementing the corresponding laws
- Make the labor market more flexible by making the immigration laws more flexible (in case foreign experience is required on a temporary basis)

- ***Evaluation of the Financial Services Sector in Terms of Potential for Growth***

As mentioned above, the financial services sector has been significant contributor to growth and employment creation in Curacao over the years. The following analysis provides a more rigorous framework of analysis which examines its growth potential in terms of Sector capacity, Macroeconomic

contribution, Export readiness of companies, Cluster potential, Linkages with other sectors, International marketing potential, Environmental impact, and Socioeconomic impact.

*Table 12 Sector Capacity using the 6Ms Model – Domestic Financial Services*

<b>Criteria</b>	<b>Overall Rating</b>	<b>Comments</b>
Manpower	High	The sub-sector is well endowed with respect to manpower at all levels and there are no apparent labour market constraints with respect to its requirements.
Means	High	The sub-sector is well capitalized and is well monitored and supported by the Central Bank
Methods	High	The sub-sector has good management and support systems
Machines	High	The sub-sector uses state of the art equipment and technologies
Measurables	High	The sub-sector has been profitable and has shown adequate capital adequacy and other ratios
Marketing	High	Experienced in marketing in the oligopolistic market

*Table 13 Summary of Growth Potential: Domestic Financial Services*

<b>Criteria</b>	<b>Rating</b>	<b>Justification</b>
Macroeconomic contribution	High	The sub-sector contributes in a significant way to foreign exchange earnings, GDP and fiscal revenues and has the potential to continue doing so.
Export readiness of companies	High	Exporting is not the focus of the sub-sector but given the openness of the economy it interfaces with foreigners and is therefore involved in the export of services.
Cluster potential	High	The nature of the industry, its inter-relatedness with other industries and its support from the regulatory authorities gives it strong cluster potential, which will certainly contribute to growth.
Linkages with other sectors	High	The sub-sector is highly connected with other sectors and plays a strong supportive role in the growth of many other

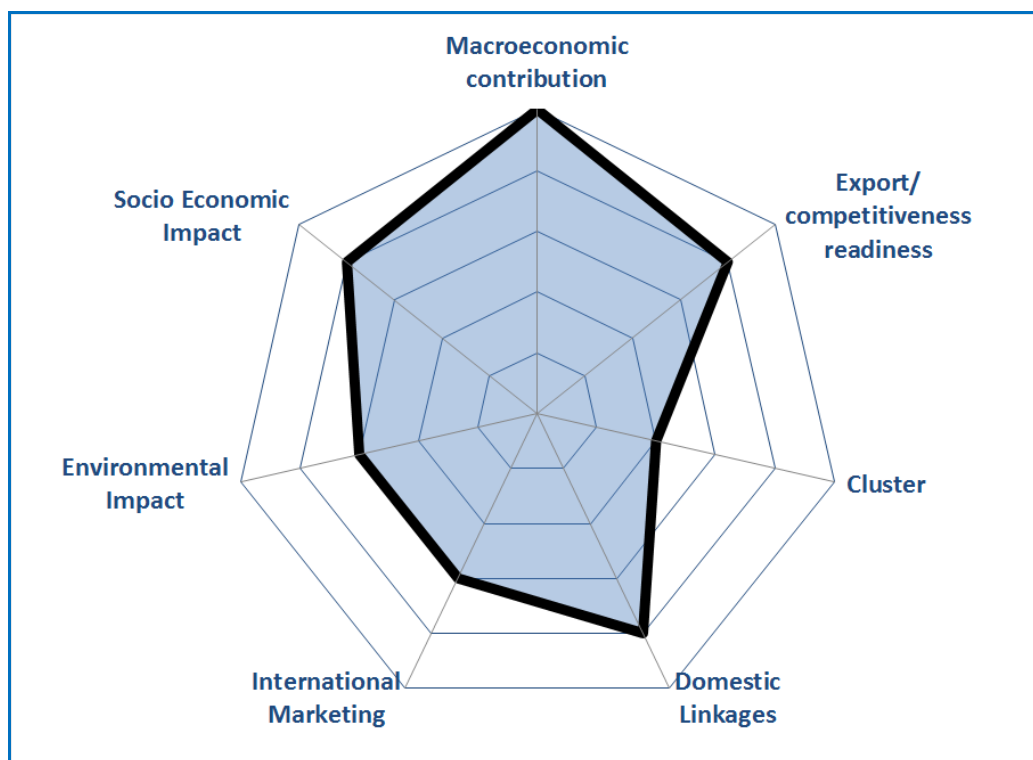
		industries.
International marketing potential	Average	These institutions are heavily focused on the domestic market though some do get involved in International activities.
Environmental impact	Average	The nature and location of the business operations of these institutions does not result in any significant impact on the environment, however there is scope for them to pursue more active strategies in the use of green technologies and provide leadership in the local economy. For example, the Domestic financial services sector could provide more loan products for green technologies.
Socioeconomic impact	High	The sub-sector contributes to job creation and income generation. Some activities and programmes contribute to community development and youth development. These factors should enable the sub-sector to continue being a major contributor to growth.

- **Summary of Growth Potential: International Financial Services**

The summary analysis of the contribution of International Financial Services to Curacao is given in Figure 52. The sub-sector has shown that it has great potential in contributing to foreign exchange earnings, GDP growth and fiscal earnings. The entities in the sub-sector are ready for the export market based on their experience and knowledge. However, the greatest constraint is the competitiveness of the industry and the threat of actions by the OECD countries. At the moment the International Financial Services sub-sector needs to be rebranded and repositioned as a dynamic centre offering quality services, responsive to the needs of customers while being well regulated. Growth potential through international marketing is limited by the competitiveness of the environment. However, the rating could be increased if all parties join together and make a concerted effort to develop the products, price them, target the appropriate niches, and conduct the required promotion.

The nature and location of the business operations of these institutions does not result in any significant impact on the environment, however there is scope for them to pursue more active strategies in the use of green technologies and provide leadership in the local economy. In terms of socio-economic impact, though declining over the last decade, the sub-sector contributes to job creation and income generation. If this sector is re-ignited, it would definitely be able to contribute in a more meaningful way to income generation, and community and youth development

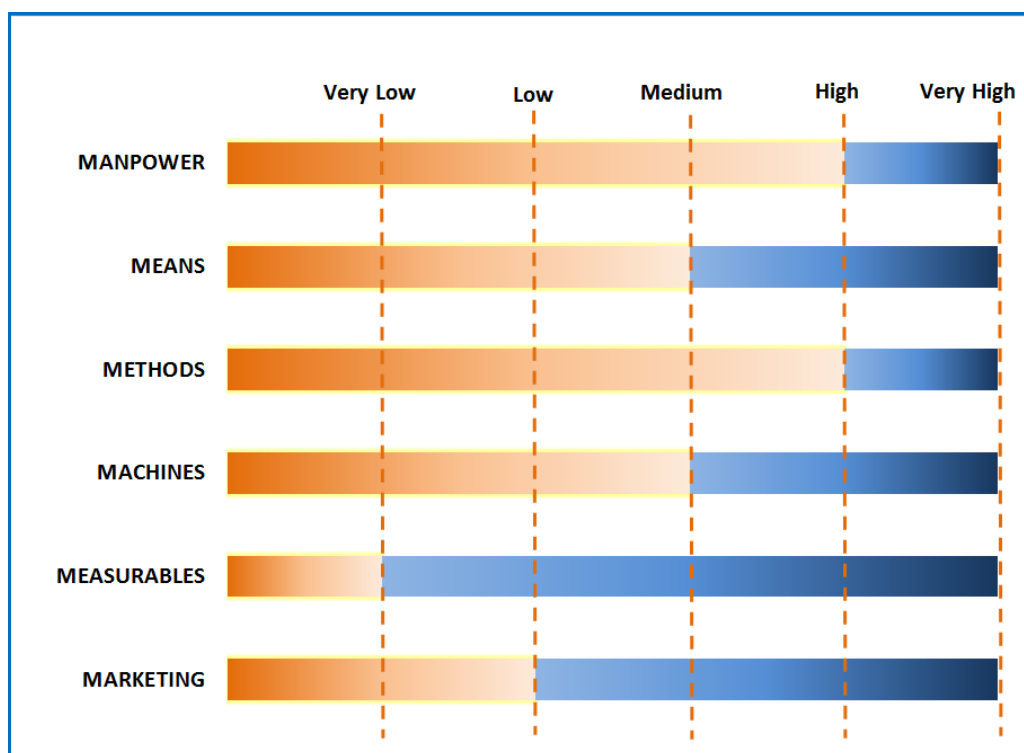
Figure 52 Contribution of International Financial Services to Curacao



Source: Authors analysis

Based on the consultations held with stakeholders, the sub-sector is considered to be well endowed with respect to manpower at all levels and there are no apparent labour market constraints with respect to its requirements. The sub-sector is fairly well capitalized and is supported by CIFA however some disinvestment has taken place in recent years. The sub-sector has good management and support systems. The sub-sector uses state of the art equipment but needs to implement the legislation to facilitate the development of new products. The sub-sector's performance has deteriorated over the last decade or so. The sub-sector is very competitive and the trends and outlook are uncertain especially with the constant threat of grey listing by OECD. Figure 53 summarises the diagnostic undertaken for the sector.

Figure 53 Sector Analysis of International Financial Services



Source: Authors analysis

### Conclusions

The Financial Services sector is very important to the economy of Curacao in terms of contribution to GDP, employment and fiscal revenues. The industry is well regulated and is a critical pillar of the economy. The Domestic financial services sub-sector is stable and comprises numerous institutions which provide traditional financial services to the market. The International financial services sub-sector still plays a major role in the economy but has declined significantly since 2000.

The Financial Services sector should definitely be targeted as a growth sector. Policies and strategies must be implemented to restore the strength of the International sub-sector while maintaining the stability of the Domestic financial services sector.

#### d. Oil Refinery and Oil by-Products

### Background

Venezuela's state oil company PDVSA has been in charge of operating the Curacao-owned Isla refinery since 1985. The refinery was opened by Shell during World War One, providing employment for thousands of Curacao residents.

Today, Curacao's large Isla Refinery sits at the centre of a controversy over the future of the island's sustainable development. In recent years, the 335,000-barrels-per-day facility has been plagued with technical problems. The growing concerns about the refinery include:

- The emission of large amounts of greenhouse gases such as sulfur dioxide (SO<sub>2</sub>), nitrous oxide (NO) and carbon dioxide (CO<sub>2</sub>), which are all extremely damaging to the environment and public health
- The distinctive smell of sulphur emissions which are unpleasant to those that visit or live in Curacao
- The growing number of court cases being brought against the refinery by residents in neighbouring communities, and
- The low contribution of the refinery to local taxable income.

Many Curacao residents are in support of the closing of the facility and the government will face a major decision on January 1st 2019, when the present lease contract of Refineria di Kòrsou (RdK), with its operator Petroleos de Venezuela S.A (PDVSA) expires.

### ***Relevance of the sector***

#### **- Contribution to employment and GDP**

At present, direct and indirect employment at the refinery is estimated at some 2,250 persons (employees, contractors and employees of suppliers). The refinery contributes an estimated 5.3% to the island's GDP, some NAf 265 million per annum. Studies have however revealed that the refinery's contribution to GDP is gradually decreasing and is estimated to fall to about 4.7% by 2018.

#### **- Global market for oil**

Oil is one of the most traded commodities in the world and many countries remain heavily dependent on oil as a key input for their energy supplies, manufacturing, and service industries. Fluctuations in the price oil have important effects for oil producing countries/exporters. The demand for oil is heavily affected by factors including the price of substitutes (e.g. market price for gas), changes in climate and market speculation. The Organization of Petroleum Exporting Countries (OPEC) accounts for an estimated 40% of current world oil supply. Non-OPEC countries account for the remaining portion and nearly every oil-producing region has been expanding their production in the last decade (which has seen world oil consumption increase by 15%, from 76.5 million barrels per day in 2001 to 87.9 million barrels per day in 2010). According to NYMEX, the current price per barrel of oil stands at US\$93.43 per barrel. The Energy Information Administration expected growth in world demand for oil to increase to nearly 89.7 million barrels per day by 2013.

#### **- Future Trends and Outlook:**

##### ***The market for oil bi-products***

Globally, the prices for crude oil and major oil products (like gasoline, diesel, jet fuel, and heating oil) continue to advance, with some interesting changes on the supply side emerging. Recently, traditional raw material providers are moving to supply international markets with value-added processed



products or oil bi-products. These products are being bought by millions of individuals at the wholesale level or directly from retail outlets. Among the main bi-products of oil growing on the global market are:

- *Gasoline*

Over the next five years, global demand for natural gas will rise at an average annual growth rate of 2.7% according to a report from the International Energy Agency (IEA) entitled MEDIUM-TERM GAS MARKET REPORT 2012. The projected growth rate is more than 10% higher than the projected average annual growth of 2.4% in last year's report<sup>101</sup>. Pike Research estimates that by 2012, the global gasoline market will reach some 375 billion gallons per year, the global diesel ground transportation market will hit 427 billion gallons per year, and aviation and marine fuel demand could add some 200 billion gallons per year to the global market<sup>102</sup>. Total global demand is expected to rise to 139 trillion cubic feet in 2017, up from about 119 trillion cubic feet in 2011<sup>103</sup>. The IEA also predicts that Chinese demand (forecasted to grow to more than 96 trillion cubic feet) for natural gas will double in the next five years and that the country will become the world's third largest importer of natural gas, trailing only Europe and Asia Oceania (primarily Japan and Korea)<sup>104</sup>. US demand for natural gas is also expected to grow from about 24 trillion cubic feet in 2011 to about 27.5 trillion cubic feet in 2017, driven by a 66% increase in demand for gas to generate electricity<sup>105</sup>. The world's biggest investor-owned oil and gas company, Exxon, expects energy use overall will grow 35 percent by 2030, if people continue to use as much energy as they do presently.

- *Petro-chemicals*

Over the last decade, the demand for petro-chemical products has been growing rapidly, dominating the global chemicals market with a share of 40 percent. The basis of this growth lies in the fact that modern industrial and consumer goods require polymers and derivatives of petrochemicals which are integral to almost every product. It is estimated that by the end of 2012, the global petrochemicals market will be worth some US\$609.3 billion<sup>106</sup>. Petrochemical infrastructure development is driven by growth in newly industrialised nations turning to the production of polymer products, and those which have a high demand for fertilisers and fuel additives<sup>107</sup>.

Among the most popularly demand petrochemicals on the global market are: ethylene derivatives (global demand in 2008 was 126 million tons, and is growing at an estimated rate of 4.9%); propylene derivatives (global demand in 2008 was 77.1 million tons and is growing at an estimated rate of 5.4%); benzene, toluene and xylene (global demand in 2002 was 33.6 million tons and growing at average

101 <http://247wallst.com/2012/06/05/global-natural-gas-demand-to-rise-sharply-iea-report/#ixzz23dRIgvS2>

102 <http://cleantechnica.com/2012/02/20/report-global-biofuels-market-could-double-to-185-3-billion-by-2021/>

103 <http://247wallst.com/2012/06/05/global-natural-gas-demand-to-rise-sharply-iea-report/#ixzz23dRIgvS2>

104 <http://247wallst.com/2012/06/05/global-natural-gas-demand-to-rise-sharply-iea-report/#ixzz23dRPTGtC>

105 <http://247wallst.com/2012/06/05/global-natural-gas-demand-to-rise-sharply-iea-report/#ixzz23dRIgvS2>

106 [http://www.visiongain.com/Press\\_Release/222/Petrochemicals-market-to-be-worth-609-30bn-in-2012'-says-visiongain-report](http://www.visiongain.com/Press_Release/222/Petrochemicals-market-to-be-worth-609-30bn-in-2012'-says-visiongain-report)

107 [http://www.visiongain.com/Press\\_Release/222/Petrochemicals-market-to-be-worth-609-30bn-in-2012'-says-visiongain-report](http://www.visiongain.com/Press_Release/222/Petrochemicals-market-to-be-worth-609-30bn-in-2012'-says-visiongain-report)

annual rates of 3.8%, 4.1% and 6.3% respectively); and paraxylene for which demand in 2002 was 18.7 million tons and is growing at an average annual rate of 6.8%<sup>108</sup>.

The Chinese petrochemicals industry is currently the largest and fastest growing in the world and is imports-dependent, which will continue to benefit the producers in other countries such as Saudi Arabia, Japan, Korea and the US<sup>109</sup>. China recently surpassed North America and Europe as the largest petrochemical consumer due to impressive demand from its large population. Demand for basic petrochemicals and major plastics in China has increased from 37.949 mln tpa in 2000 to 100.843 mln tpa in 2010, at a CAGR of 10.3%.<sup>110</sup>

India is also amongst the fastest growing petrochemicals markets in the world. The industry currently provides the foundation for manufacturing industries such as pharmaceuticals, construction, agriculture, packaging, textiles, automotive, etc in India, and booming along with the country's ongoing economic development<sup>111</sup>. Despite challenges in its production capacity and intense competition from China, the future of the Indian petrochemicals industry remains bright with domestic demand driving the market for products<sup>112</sup>. With the Government announcing an infrastructure development program of over IN1 500 Billion, coupled with key end-use sectors like auto, personal/lifestyle products, and retail (packaging), a boost is expected in the demand for petrochemical products in India<sup>113</sup>.

- *Lubricating Oils*

According to New Report by Global Industry Analysts, Inc., the global market for lubricating oils and greases is projected to reach 10.9 billion gallons by the year 2017. Growth will be primarily driven by recovery in GDP growth in economies worldwide, increase in demand for commodities and subsequent rise in industrial production, manufacturing activity, purchase of new industrial machinery and rising number of motor vehicle ownership across the globe<sup>114</sup>. Geographically, while growth in developed markets is said to have slowed somewhat in recent years (there is still much demand for up-market products in Europe and North America), demand for such products in developing markets is booming, where the modernization in manufacturing machinery and increase in motor vehicle fleets calls for superior quality lubricants. Among the main developing markets are China, India, Pakistan and Africa, much of whose demand is being met by manufacturers in the United Arab Emirates.

- *Paints*

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108 <http://www.meti.go.jp/english/information/downloadfiles/c0404PetroProe.pdf>

109 <http://www.plastemart.com/Plastic-Technical-Article.asp?LiteratureID=1688&Paper=increased-demand-petrochemical-industry-China-drive-global-recovery-2015-polyethylene-terephthalate-PET-consumption>

110 <http://www.plastemart.com/Plastic-Technical-Article.asp?LiteratureID=1688&Paper=increased-demand-petrochemical-industry-China-drive-global-recovery-2015-polyethylene-terephthalate-PET-consumption>

111 <http://www.chemtech-online.com/events/chemtech/2010/01/indian-petrochemical-industry.php>

112 <http://www.chemtech-online.com/events/chemtech/2010/01/indian-petrochemical-industry.php>

113 <http://www.chemtech-online.com/events/chemtech/2010/01/indian-petrochemical-industry.php>

114 [http://www.prweb.com/releases/lubricating\\_oils/lubricants\\_greases/prweb9351336.htm](http://www.prweb.com/releases/lubricating_oils/lubricants_greases/prweb9351336.htm)

According to Orr and Boss Inc., global demand for global paints and coatings is estimated to be some 25 – 27 billion litres per annum, with decorative and general industrial coatings accounting for the largest volumes of coating, 50% and 10% respectively. Geographically, the greatest demand exists in Europe (an estimated 34%), Asia Pacific (31%) and North America (21%). Key drivers of the coatings industry include: overall economic activity, the construction market, housing activity, vehicle builds and general industrial production. Despite the sluggish global environment, the global coatings market in 2011 reached \$ 106.7 billion and is expected to value an estimated US\$142.4 trillion by the end of 2016 (at a compound annual growth rate of 6.5%)<sup>115</sup>.

- **Current plans, policies and regulations**

The government of Curacao has been having dialogue with the Venezuelan government over the future of the refinery. A study published in January 2011 by Ecorys, a Dutch consulting company, set out three future scenarios - upgrading Isla, building a new refinery at a different site or closing Isla and redeveloping the land. Therefore, when the lease expires in January 1st 2019, the government is expected to come to a decision as to which of the above options will be pursued. Unlike other Caribbean nations, Curacao is not part of Venezuela's Petrocaribe project; therefore oil is made available through long-term financing agreements with the Venezuelan government. The refinery currently produces significant quantities of oil a day for shipment to the US and South America.

***Evaluation of the Refinery in Terms of Potential for Growth***

As mentioned above, despite the fact that the refinery has not been a significant contributor to GDP in comparison to other sectors such as finance or tourism, an upgrading of the facility accompanied by a venture into the production of oil bi-products for which sales are booming internationally, could see the refinery becoming a much more significant contributor to growth and employment creation in Curacao. The following analysis provides a more rigorous framework of analysis which examines its growth potential in terms of Sector capacity, Macroeconomic contribution, Export readiness of companies, Cluster potential, Linkages with other sectors, International marketing potential, Environmental impact, and Socioeconomic impact.

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115 <http://www.wpcia.org/News/2011report.html>

Table 14 Sector Capacity using the 6Ms Model – Oil Refinery

Criteria	Overall Rating	Comments
Manpower	Average	Qualified labour (mainly from Venezuela) in this area is available as the operations have existed for many years, however, there is a scarcity of skilled labour in the local market
Means	Very Low	The Government may have the ability to raise funds through loans or securing investments from the highly liquid domestic financial sector but massive investment would be required and risk adjusted returns would need to be high. To date, low levels of investments have been made reflected in the fact that the plant is still old
Methods	High	Managements systems would be strong because of the long operating history of the refinery though these would need upgrading. Supply chains should also be well defined and output should be readily sold in the local or export market. Transportation, logistics and storage should operate quite smoothly.
Machines	Low	Technology is now outdated which is a key issue in discussions relating to the future of the refinery. Research and development have been conducted but major costs would be incurred to make changes moreover the plant is leased out until 2019
Measurables	High	Contributes about 5% to GDP, as mentioned earlier it contributes to employment (hires 2,250 persons) but minimal contribution to fiscal revenues.
Marketing	Average	Demand for refined petroleum products is currently high. However, competition from other oil producers is strong. Recent analysis has been conducted in terms of future strategies and plans for the refinery.

Table 15 Summary of Growth Potential: Oil Refinery

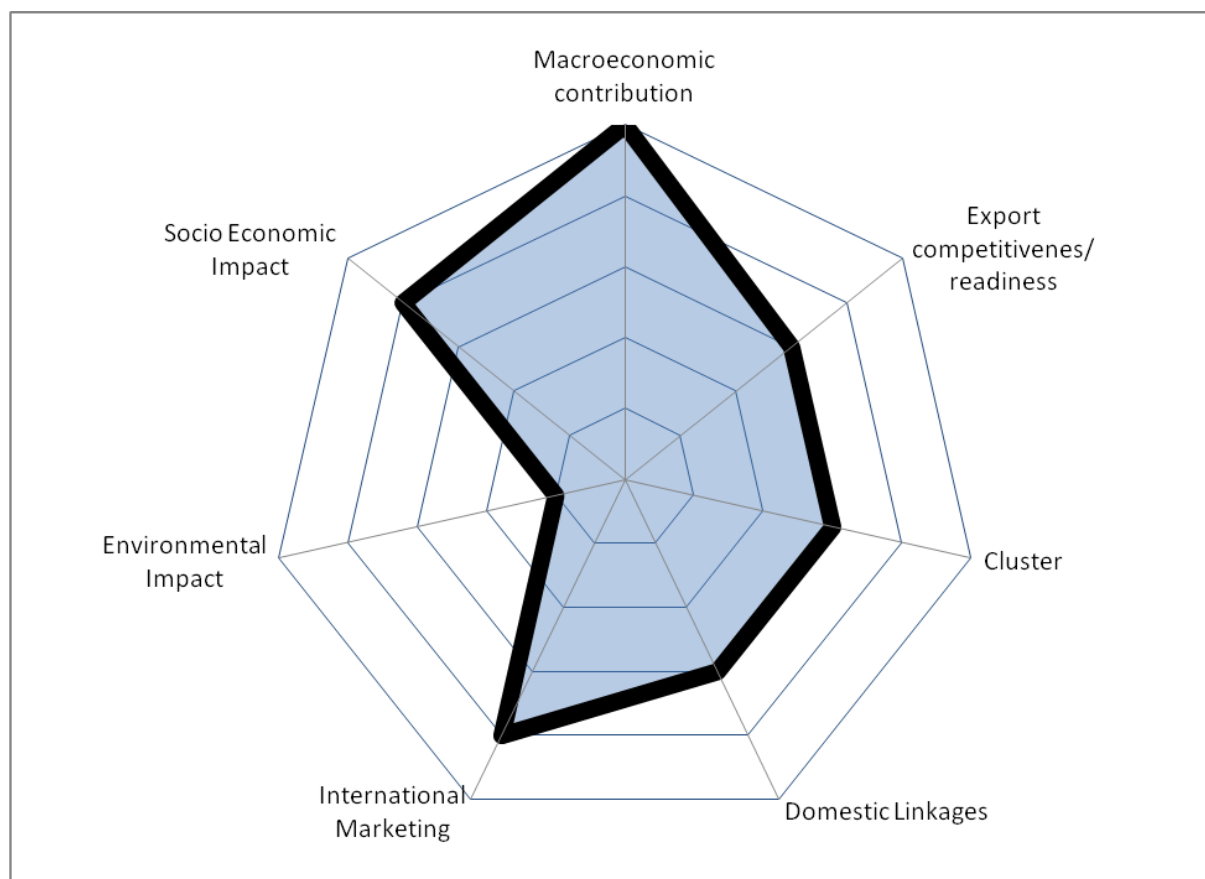
Criteria	Rating	Justification
Macroeconomic contribution	Very High	The refinery could see very strong growth prospects if operations are improved. Upgrading the facility through the replacement of old machinery with modern equipment would improve efficiency and possibly increase output.
Export readiness of companies	Average	Given the length of operations at the refinery, experience has been gained on the requirement of how to successfully export its products. The refinery however needs to find ways of improving its competitiveness such as lowering costs, improving efficiency and possible diversifying into oil bi-products.
Cluster potential	Average	Opportunities exist for building on existing structures. There is reasonable strength existing in local business support organizations to support this initiative.
Linkages with other sectors	Average	Many opportunities exist for linkages with other sectors such as transportation, construction and manufacturing.
International marketing potential	High	Refined oil production has very positive growth prospects. Regionally, huge market exists for refined oil and its bi-products.
Environmental impact	Very Low	The refining of oil does not have a positive impact on the environment due to the levels of associated air, land and water pollution.
Socioeconomic impact	High	An upgrading of the refinery accompanied with a diversification of its products could see a boost in job creation in Curacao. This could create a positive impact on the community, especially amongst unemployed youth who could be trained in new areas.

#### - Summary of Growth Potential: Oil Refinery

Figure 54 shows an analysis of the potential contribution of the oil refinery to Curacao. Despite being riddled with technical problems, the refinery has the potential to increase its contribution to Curacao's GDP and foreign exchange earnings. An upgrading of the facility coupled with an improvement in the export readiness of the refinery could see an increase in efficiency, lower costs of production and possibly greater output. Many opportunities also exist for linkages with other sectors such as transportation, construction and manufacturing. Globally, the demand for oil has remained high among

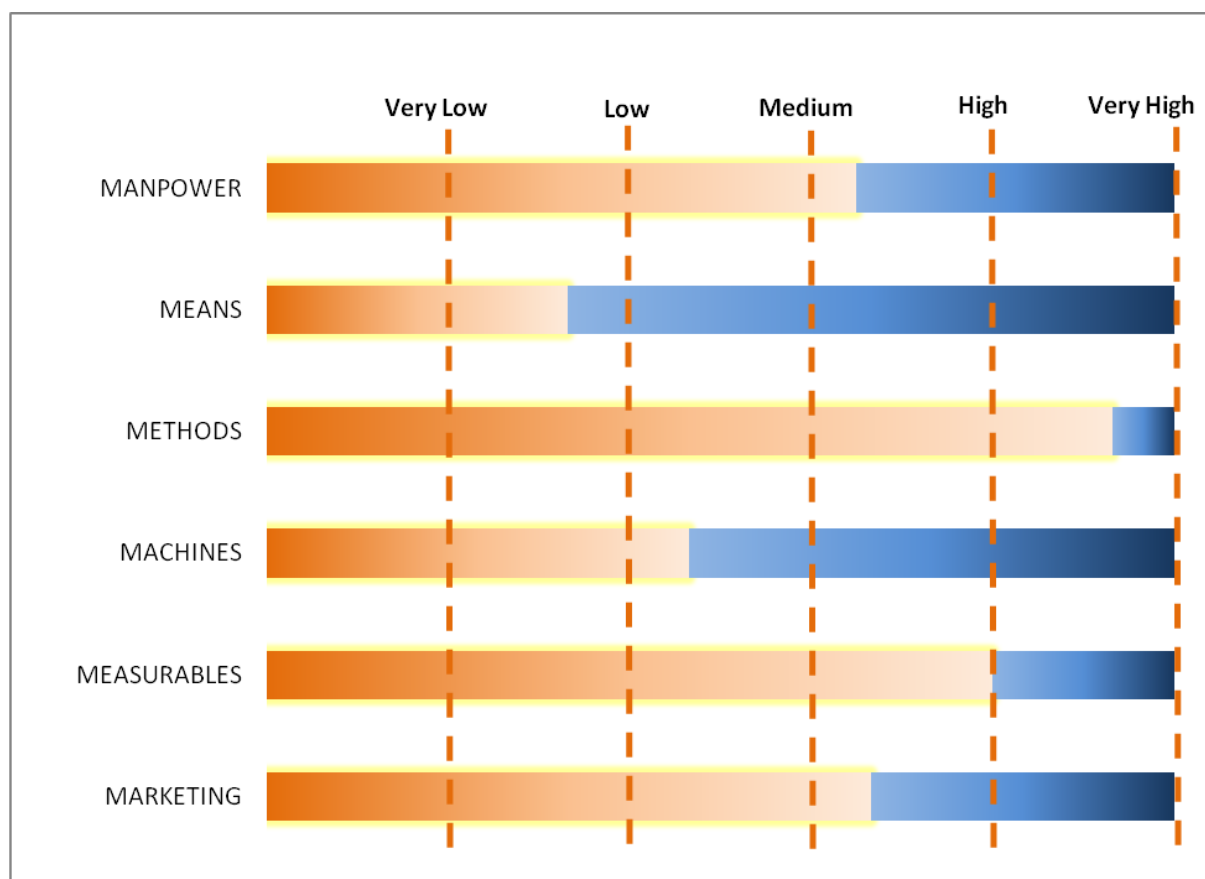
countries and is increasing rapidly in developing economies. Growth potential through international market is high and regionally (within Latin America and the rest of the Caribbean), huge markets exist not only for oil but for its bi-products. Diversification of its export base into bi-products could improve competitiveness of the refinery and generate additional employment within the community, especially amongst unemployed youth who could be trained in new areas.

Figure 54 Contribution of Oil Refinery to Curacao



Source: Authors analysis

Figure 55 Sector Analysis of Oil Refining



Source: Authors analysis

### Conclusions

Given the current state of Curacao's refinery, the government is expected to come to a major decision when the present lease contract expires in 2019. Should the government decide to continue with the current operation of the refinery, major investments will be needed to get the refinery to a modern, functional, more efficient and environmentally friendly state – preparations for which must begin prior to the contract expiration. The Government must also look at the possibility of venturing into new markets, in particular, trade in bi-products oil refinery (such as petrochemicals, gasoline, lubricants and paints, etc.) whose markets are growing substantially as outlined in the above research. Curacao's strategic geographic location would also be of key significance in this regard, as it could look at becoming a major supplier of oil bi-products to Latin America (whose continued rapid growth in recent years have provided new opportunities for oil bi-products, especially in the petrochemical industry) and the Caribbean. Major petrochemical consumer markets exist in neighbouring Brazil, Argentina, Mexico and Colombia, and demand is expected to grow rapidly within the next 5 years. Demand for natural gas has also increased its energy matrix participation in the region. In Brazil, demand is expected to grow from 2.4 to 3.3 billion cubic feet per day by 2020 and by 2030 natural gas is expected to represent nearly 30% of the region's total energy mix <sup>116</sup>. In terms of lubricants, Curacao also has an opportunity to supply the Latin American market, whose demand is estimated at

<sup>116</sup> <http://www.uop.com/latin-americas-growing-economy-presents-opportunities-oil-gas-petrochemicals/>

3.15 million metric ton per year<sup>117</sup>. In summary, diversification, if done in the correct way, could see Curacao reaping significant economic and financial gains from trade in these oil bi-products. On the other hand, a decision to discontinue operations of the refinery would mean that Curacao should explore the continued development and use of alternative fuel supply sources. Furthermore, a decision should be made as to whether the current site of the refinery ought to be redeveloped for other commercial or residential purposes.

**e. Maritime, Airport, Transshipment and Vessel Registration Cluster**

**Background**

**- Harbor**

The port of Willemstad is the main port in Curaçao with multiple connections from/to the Caribbean region as well as from/to South, Central and North America and the European Union. In addition to transshipment handling, the port also provides general cargo, container, bulk, break-bulk, neo-bulk and, roll-on/roll-off facilities, reefer facilities, stripping/stuffing, storage facilities and the refinery. Curaçao's other commercial ports are Bullen Bay, Caracas Bay, Fuik Bay, St. Michiel's Bay and Spanish Waters<sup>118</sup>.

As one of the largest commercial dry-dock in the Caribbean, the Curaçao Dry-Dock (CDM) is well known in the region for the high quality of its services and despite being considered one of the most expensive dry docks in the Caribbean, due to strong reliance on import materials and skilled labor, ship owners still consider this dock as relatively inexpensive, due to the highly favorable rate of the Euro<sup>119</sup>. The performance of the CDM is provided in Figure 56. It indicates the manhours sold and which is prone to cyclical variations. It has been reported that major investment is needed due mainly to obsolete equipments. Meanwhile, the recent global economic and financial crisis has affected in the medium term CDM operations.

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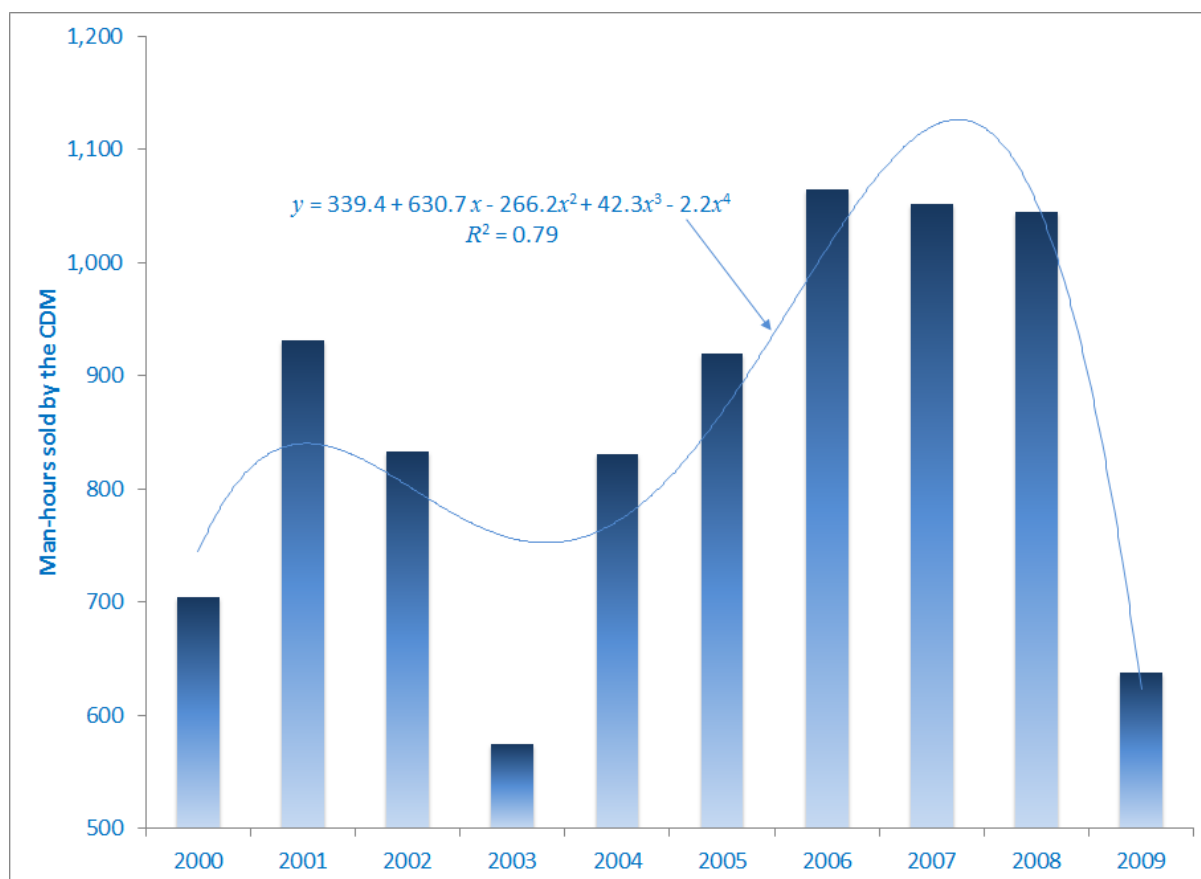
117 [http://www.imakenews.com/lng/e\\_article002308881.cfm?x=b11.0,w](http://www.imakenews.com/lng/e_article002308881.cfm?x=b11.0,w)

118 Spanish waters is not considered a harbour within the harbour legislation of Curacao

119 Economic significance of the island territory of Curaçao – Working group: Sustainable economic growth Curaçao 2009 – 2024), Curaçao, April 22, 2009.



Figure 56 Productivity of the CDM, 2000-2009



Source: Author calculations based on CBS Statistics

#### - Airport

Curaçao Airport has an important strategic location, making the country an excellent distribution hub for several important regions. Its international airport, 40 miles north from Venezuela, offers transshipment/storage of goods and fuel supply and transit services for transatlantic flights to/ from the entire Caribbean region as well as South, Central, North America and European Union markets.

Relevance of the sector

The performance of Curaçao Ports Authority (CPA) and of the Curacao Airport Holdings (CAH), and the relevance of these sectors to the economy of Curacao are evaluated in the tables below.

#### - Landing of Aircrafts

Over the years, Curaçao International Airport continued to provide a significant number of flights to/from the region to/from important destinations such as Europe, United States and South America which contributed to keep the figures on commercial landings stable. An increased number of (cargo) carriers stopping in the island for fuel, contributed to expand the amount of non-commercial landings in the country's international airport.

Table 16 Aircraft landings 2005-2010

	2005	2006	2007	2008	2009	2010
<b>Commercial landings</b>	16,476	16,453	19,034	18,461	18,356	.
<b>Non-commercial landings</b>	2,137	2,033	1,726	3,912	4,185	.
<b>Total</b>	<b>18,673</b>	<b>28,486</b>	<b>20,760</b>	<b>22,373</b>	<b>22,541</b>	<b>23,675</b>

Source: International Airports on the islands and Central Bureau of Statistics (CBS)

### - Harbour Statistics

Despite being a popular cruise ships destination and a significant transshipment point in the Caribbean, as the table below shows, the harbor's overall performance has slightly decreased in the past years.

Table 17 Ship and container movements 2006-2010

		2006	2007	2008	2009	2010
<b>Ships piloted into port number of ships</b>		2,889	3,039	3,144	<b>2,866</b>	<b>2,464</b>
	<b>of which: tankers</b>	920	1,030	1,188	<b>1,016</b>	.
	<b>Cruise ships</b>	205	257	215	<b>235</b>	.
	<b>others</b>	1,764	1,752	1,741	<b>1,614</b>	.
<b>Tonnage (1000 GRT)</b>		48,584	55,554	62,387	<b>60,020</b>	<b>52,177</b>
	<b>of which: tankers</b>	25,234	30,914	36,690	<b>32,905</b>	.
	<b>others</b>	23,350	24,637	25,697	<b>27,115</b>	.
<b>Container movements</b>		56,304	60,465	62,920	<b>61,146</b>	.
	<b>of which: transshipments</b>	7,777	10,032	8,768	<b>6,923</b>	.
<b>TEUS</b>		90,759	97,271	102,082	<b>97,913</b>	<b>93,603</b>
	<b>of which: transshipments</b>	11,999	15,727	13,707	<b>11,147</b>	.

Source: Statistical Yearbook Netherlands 2010, Central Bureau of Statistics (CBS), Willemstad 2010.

According to the Curaçao Economic Outlook report<sup>120</sup>, over the past years, the number of freighters and transshipments containers passing through the port of Willemstad has been decreasing at 5 percent in 2008, 9 percent in 2009 and 16 percent in 2010 compared to the respective previous years.

<sup>120</sup> Curaçao Economic Outlook 2011, En route towards the strengthening of the economic structure of new country Curaçao. Ministry of Economic Development, Government of Curaçao. 2011.

This decline is mainly due to the growing competition from harbors in Panama and Jamaica, which have upgraded their harbor infrastructure and activities to accommodate post-Panama container ships. Other harbors in the region such as St. Maarten, Cartagena, Trinidad and Manzanillo have also been investing in post-Panama infrastructure. The international financial and economic crisis also affected the growth rate of world trade bringing negative consequences for local harbor activities in general. Another factor pointed out by the study is related to the growing number of cargo-handling alliances that have being formed in the past years between shipping-liner companies and terminals in the region, taking advantage of the opportunities resulting from the opening of the new Panama Canal in 2014.

In the global scenario, some important changes in distribution and cargo-handling capabilities have been also noticed. Twenty years ago more than half of the top 20 container ports were in America or Europe reflecting imports into both regions around the globe. Today Asian countries have proven their power as global exporters. With Singapore on the top the list, fourteen of the top 20 container ports are in Asia, with eight in China<sup>121</sup> (see Table 18).

Table 18 World's largest container ports by volume transhipped (million TEUs\*)

1989		2009	
Hong Kong	4.5	Singapore	25.8
Singapore	4.4	Shanghai (China)	25.0
Rotterdam (Netherlands)	3.9	Hong Kong	20.9
Kaohsiung (Taiwan)	3.4	Shenzhen (China)	18.2
Kobe (Japan)	2.5	Busan (South Korea)	11.9
Busan (South Korea)	2.2	Guangzhou (China)	11.2
Los Angeles (United States)	2.1	Dubai (United Arab Emirates)	11.1
New York/New Jersey (United States)	2.0	Ningbo (China)	10.5
Keelung (Taiwan)	1.8	Qingdao (China)	10.2
Hamburg (Germany)	1.7	Rotterdam (Netherlands)	9.7
Long Beach (United States)	1.5	Tianjin (China)	8.7
Yokohama (Japan)	1.5	Kaohsiung (Taiwan)	8.5
Antwerp (Belgium)	1.5	Antwerp (Belgium)	7.3
Tokyo (Japan)	1.4	Port Klang (Malaysia)	7.3
Felixstowe (Britain)	1.4	Hamburg (Germany)	7.0
San Juan (Puerto Rico)	1.3	Los Angeles (United States)	6.7
Bremen/Bremerhaven (Germany)	1.2	Tanjung Pelepas (Malaysia)	6.0
Oakland (United States)	1.1	Long Beach (United States)	5.0
Seattle (United States)	1.0	Xiamen (China)	4.6
Manila (Philippines)	0.9	Laem Chabang (Thailand)	4.6

Source: Containerisation International ; reproduced in The Economist "Trading places – The world's largest container ports", 24 August 2010.

\*Twenty-foot equivalent units

121 "Trading places – The world's largest container ports". The Economist. 24 August 2010.

### - Impact of transportation sector

Overall the transportation sector continues to play an important role in Curacao's economy, accounting for almost 7 percent of total employment in the island (over three thousand persons employed) and 8 percent of its GDP. (see Table 19).

Table 19 Contribution of transportation sector to the economy of Curacao

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
<b>Employment *</b>	3,885	3,442	3,322	3,371	3,192	3,143	3,124	3,488	3,812	3,894
<b>Value added transportation market prices (mln NAF) **</b>	286.2	355.1	390.6	396	318.2	327.8	361.1	386.6	402.4	427.5
<b>Contribution to GDP (%) **</b>	7.5%	9.3%	10.1%	10.0%	7.9%	7.8%	8.2%	9.2%	7.9%	8.3%
<b>Gross fixed capital formation (mln NAF) **</b>	164.2	235.2	346.1	192.1	198.3	321.0	324.5	n.a	n.a	n.a

Source: Central Bureau of Statistics.

Note: \*employment figures include economic activity transport and storage; 2007-9 using yearbook series; \*\* GDP and gross fixed capital figures concern sector transport, storage and communications

### - Institutional, legal and regulatory framework

In 2009, Curaçao Airport Holding (CAH), the airport's owner, approved the takeover of Alterra's 51 percent share in Curaçao Airport Investment (CAI) by A-port, a consortium formed by Unique (Zurick Airport), the Brazilian company Camargo Correa and the Chilean IDC. Since then, A-port has been responsible for overseeing all the activities and investments in the airport.

All the harbour activities in the island are managed by the Curaçao Ports Authorities (CPA) on behalf of the local government. The Directorate of Shipping & Maritime Affairs is accountable for the supervision of the implementation of the maritime regulations. It is responsible for the inspection, certification and safety of ships sailing under the flag of the Kingdom of the Netherlands. KTK Tugs is a division of Curaçao Ports Authority. The company is responsible for all towing, mooring and pilot services in the ports of Curaçao.

### - Trends and Outlook

#### Airport

The Government of Curaçao expects to have higher revenue in 2012, compared to 2011. The estimated revenue for 2012, NAF 1.4 million, will be generated by higher expected passenger numbers. For the coming years, CAH, considered as an important partner in the sector, will focus its efforts on the renovation of the runway in order to comply with international standards<sup>122</sup>. The recent

<sup>122</sup> Curaçao Economic Outlook 2011: En route towards the strengthening of the economic structure of new country Curaçao, Report, Ministry of Economic Development, Curaçao, 2011.

downgrading of the airport by the US airport authority is cause for concern and additional security measures will need to be taken to ensure that the airport upgrades its current status.

### **Harbor**

In 2012, the Curaçao Ports Authorities expects 219 cruise-ship calls. Because larger cruise ships are expected to anchor in the island, CPA also expects an increase of 13 percent in the number of passengers, compared to the figures of 2011 (419,000). Overall, CPA is seeking long-term projects that will enable to increase the interest of cruise corporations in the island, as it is expected that very large vessels will become the norm in Caribbean waters once the expansion of the Panama Canal is finished in 2014. CPA believes that this will be an important opportunity for the local port to grow in capacity in order to accommodate these larger vessels, if such vessels will stop in Curacao during their journey (which raises the question of the maritime routes now used by shipping lines). The CPA plan includes possible larger construction projects in the Caracas Bay area, a new cruise terminal at the existing Mega Pier, the possibility for a second mega pier, and waterfront developments at the Scharloo and Otrabanda wharfs to increase the number of cruise ships, cruise – and-stay over passengers, the volume of freight cargo as well as other operational activities for the CDM in later years<sup>123</sup>. None of the activities presented in the plan are yet approved by government nor are the funds mobilized for such investments. The CDM would require substantial investment in its equipment and infrastructure in the medium term to upgrade its operations.

### **- Current plans, policies and regulations**

#### **Airport**

Curaçao has been responsible for the elaboration of its own policies, regulations, air traffic control, agreements and granting of licenses to air carriers since the country gained its autonomous status, giving the country an opportunity to re-formulate the island's aviation policy. Curaçao Airport Holding intends to transform the island into a "hub", connecting the Americas, expanding the Airport area into an Airport City; attracting aviation and non-aviation linked business of all types; increasing the amount of passengers and cargo traffic.

As part of this hub vision plan, CAH intends to align its strategies as much as possible with the objectives of its local partners. As already mentioned above, among these objectives, CAH intends to create an Airport City, to stimulate and facilitate the growth of the airport and the island's economy; develop and upgrade the airport infra-structure; ensure high quality services for airlift, cargo and services within the airport complex and create an airlift development strategy that is supported by all strategic partners<sup>124</sup>.

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123 Ibid

124 Ibid

## Harbor

In 2011, the Maritime Authority of Curaçao released a qualitative analysis on the development of the Curaçao Maritime sector. The objective of the study was to determine which developments and activities should be considered of importance to the maritime sector and to formulate policy recommendations based on this material<sup>125</sup>.

The study highlighted that the fleet development in the former Netherlands Antilles in general is lagging behind the development of global fleets. One cause of the under development of the Antillean fleet can be linked to the competing regimes that were created in the European Union (EU) after introduction of the tonnage system at the end of the nineties and beginning of 2000 in most European shipping countries. Influenced by this, mostly Dutch owned ships left the Antilles register. In addition to this, the flag requirement was implemented by the EU, and the cabotage regulation (territorial) became stricter under the influence of some EU countries. Consequently a great amount of shipping companies which holds short sea vessels were obligated to change the registration of their ships.

In this scenario, researchers tried to determine which factors have played in this and how under a new constitutional framework one could increase not only the maritime interest in the country but also the registration of ships and the establishment of shipping companies. The study has detected that one of the major problems in the process is related to the obstacles in the registration and certification, as well as in the inspection policy that were seen by stakeholders as the most obstructive and bureaucratic. There was also a lot of criticism on that made the stakeholders on the inspection and enforcement of regulations for the shipping industry. According to them there is no clear policy on this and central guidance is lacking.

Among the recommendations, stakeholders advised for instance that shipping registration be expanded to EEA (European Economic Area) countries, the outermost areas of the EU, Switzerland and the United States.

Overall according to most representatives from the business community interviewed during this study, Curaçao and the natural harbours of the country are a big advantage and should serve as a catalyst for the development of shipping, the shipping-related industries and the yachting sector. For that, it is important for the government to have an integrated vision of maritime policy. All maritime activities (ports, shipping industry, yachting, fishing etc) should be involved, regulations must be reviewed and changed and processes must be shorten in order to optimize the sector.

## Evaluation of the Transport Sector in Terms of Potential for Growth

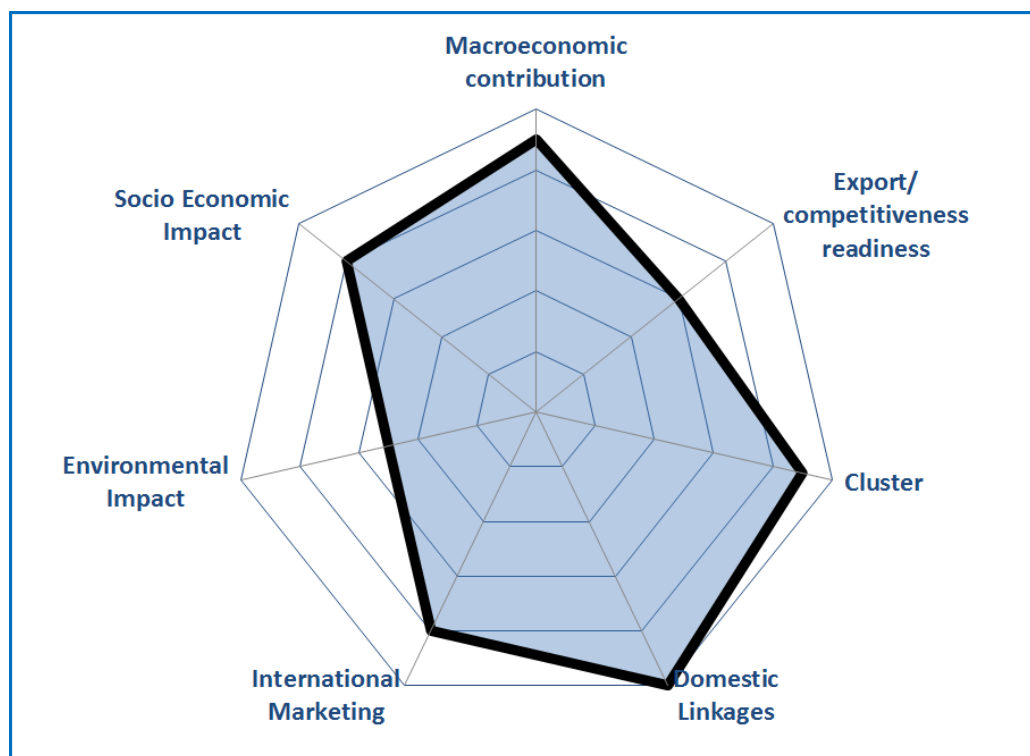
The sector makes a large contribution to the national economy, employment and foreign exchange. It has many indirect linkages to other sectors of the economy and its proper functioning enables

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<sup>125</sup> Economic significance of the island territory of Curaçao – Working group: Sustainable economic growth Curaçao 2009 – 2024), Curaçao, April 22, 2009

Curacao to become better integrated in the world economy. Figure 57 provides a summary of the evaluation of the sector in terms of its attractiveness for government support and prioritisation. The sector was evaluated to make a major contribution to improving the balance of payments, contributing to economic output and fiscal revenues. The sector is also a creator of job and of youth employment. It is also a sector which has export readiness and on which existing structures are strong. Finally, the international and regional outlook is positive, and the environmental impact, if judiciously planned, can be attenuated by improved technologies.

Figure 57 Sectoral importance for transport

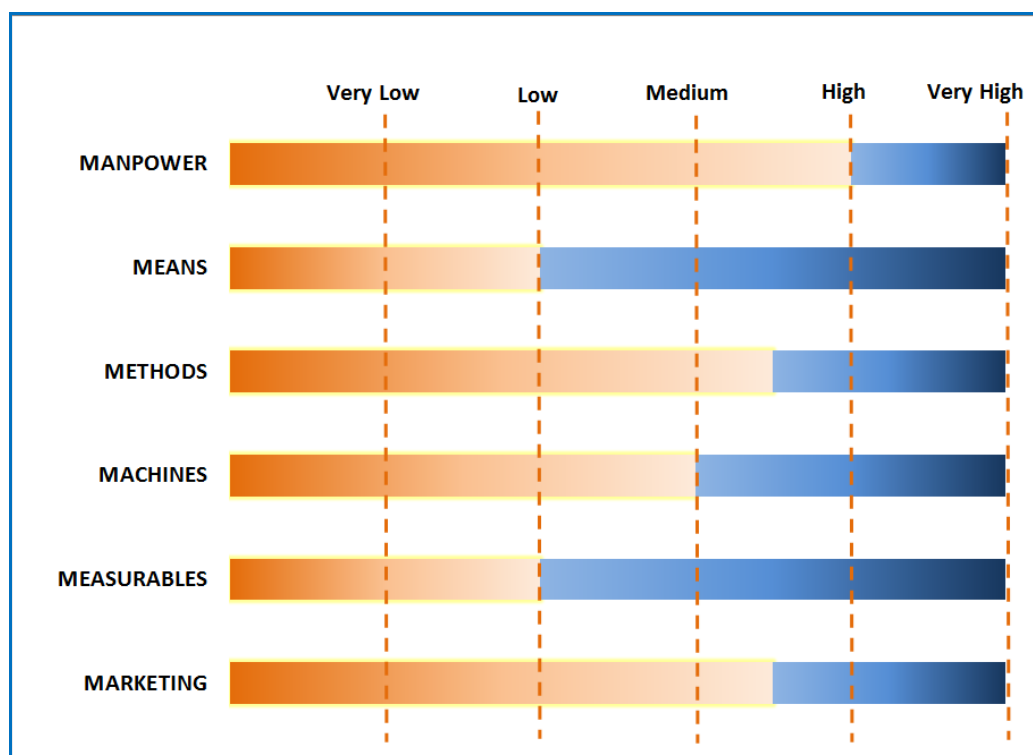


Source: Authors analysis

The analysis of the sector according to the 6Ms approach reveals that the sector in question is relatively well positioned in a number of areas, notably in terms of manpower, where qualified labour is available and management leadership exists (see Figure 58). It scores well in terms of methods, where the associations are strong and the integration of operations efficient. It also scores well in terms of marketing, with a positive medium term outlook, even if competition and rivalry is high.

The results are less positive in the other areas, notably in terms of measurable, where past performance has been poor and market share has been lost to other Caribbean Islands. The sector also did not perform so well in terms of means, since significant levels of investment are required, which would require private investment, something which is not guaranteed in the current climate. Also in terms of machines, there is a significant amount of upgrading required, which resulted in a lower overall score for this criterion.

Figure 58 Sectoral Analysis of Strengths in Transport sector



Source: Authors analysis

## Conclusion

The sector is considered an important sector, not only in the absolute but also because of the enormous impact it would have on other sectors, from tourism to logistics, to e-zones and to the basic price of imports for the average consumer. The sector also benefits from a number of plans which seem relatively well endorsed by stakeholders and which tackle the essential tasks to deal with, namely the upgrading of facilities and improvement in equipment, ways to attract investment, channels to recuperate business lost to other ports, and tapping into new market opportunities.

In the case of transshipment in Curaçao, policies are required to address the following inherent weaknesses observed for Curacao to become a major transshipment centre<sup>126</sup>:

- Location opposite trunk routes
- High captive volumes
- Port accessibility
- High handling capacity
- Low cost (transshipment is highly price sensitive, footloose, cost two additional moves)
- Participation strategic partner required, willing to invest (BOT)

<sup>126</sup> Curaçao Port Policy Development – Workshop phase 1. Presentation by the Maritime & Transport Business Solutions. 25 May 2012.



- Currently exclusively rights CPS for all cargo/entire island

In order to transform the Port of Willemstad in a transshipment hub, it will be necessary not only to boost its infrastructure, acquiring modern equipment and building new terminals which will allow bigger vessels to dock and transfer cargo more quickly and more efficiently, but also optimize processes and reduce economic and operational costs.

**f. Back office services, Data Centre and Digital, IT and high tech services**

Background to business services and outsourcing

The concept of specialist centres for processing back office support activities emerged at the beginning of the 1990s and was aimed at keeping costs down and improving efficiency by moving certain functions away from one central location. As companies extended their presence across borders, multinationals started to set up shared services centres and standardising operations in order to cut cost and become more competitive<sup>127</sup>. The market for outsourced services has grown significantly each year since the 1990s, reaching a total value of US\$ 45.6 billion in 2000 and more than doubling in size by 2011 to US\$ 95 billion<sup>128</sup>.

Although the sector has experienced substantial growth in the past, it is unclear whether it can sustain the same growth rate in the future. While a 2011 survey shows that 92.3% of the investors questioned believe that an increase in the attention given to back office operations and the investment in these operations will increase<sup>129</sup>, there are elements in the same reports pointing to the fact that investors will look more carefully at whether they want their back office operations to be managed offshore or inshore. Risk management will have an increasing impact on whether investors chose to work with offshore centres, with two factors being crucial: the existence and value of assets. To establish existence, investors will want to know the frequency of reconciliation, whether this is done electronically and – particularly if it is a private placement – verify that the assets are actually owned<sup>130</sup>. A report from the British Financial Service Authority (FSA) concludes that off shoring back office operations can represent a risk to market confidence, consumer protection and financial crime and recommends increased oversight over the operations and, when that is not possible, relocation to a better regulated country or repatriation<sup>131</sup>.

127 Cacciaguidi-Fahy, S., Currie, J., Fahdy, M., (2002) Financial Shared Services Centres: Opportunities and Challenges for the Accounting Profession, Council of Chartered Certified Accountants Research Report No. 79

128 Information Services Group, TPI

129 Rothstein Kass (2011) 2011 Hedge Fund Outlook: Brighter Days Ahead? [online available at [http://www.rkco.com/Corporate/Admin/AttachmentFiles/proprietary\\_research/RothsteinKass\\_HedgeFundReport2011F.pdf](http://www.rkco.com/Corporate/Admin/AttachmentFiles/proprietary_research/RothsteinKass_HedgeFundReport2011F.pdf) ]

130 Davies, P., (2010) Investors wake up to back office realities, Financial Times [online available at <http://www.ft.com/cms/s/0/058953b6-bd05-11df-954b-00144feab49a.html#axzz22yTUuk8u> ]

131 Financial Services Authority (2005) Offshore Operations: Industry Feedback [online available at [http://www.fsa.gov.uk/pubs/other/offshore\\_ops.pdf](http://www.fsa.gov.uk/pubs/other/offshore_ops.pdf) ]

Back office operations include a number of processes and actions which are intended to keep a company or institution running and functioning in an appropriate manner. The operations included in this category are very varied as they are meant to respond to the needs of companies from different sectors. Some of the most common back office operations are:

- **Call Centres:** Most companies use call centres to interact with their customers. The call centres can deal with incoming calls (enquires, complaints), outgoing calls (telemarketing, debt collection) or both.
- **Data Processing:** Companies produce a high amount of data and the processing of this data can greatly influence the company's future deficiency. These operations include gathering and extracting information, data analysis, developing and operating data base.
- **IT Operations:** The IT centre provides support to the technical management assistance for the infrastructure of the company.

Other operations that are related to the back office category can be related to software production, shipping operations, research processing, engineering and design, etc.

We review some case studies on the performance of India and Bulgaria in managing to harness investments in back-office operations, and end the section with a view on the experience of Latin American and Caribbean countries in promoting this sector.

India has established itself as a major back office centre in the world, being the most important actor in the outsourced services industry. With 2.5 million people working in back-office operation and another 1.5 million having jobs related to the industry, the Indian economy has benefited greatly from the decision of multinationals to outsource some of their operations. The Indian market for outsourced services is now valued at \$US 69 billion<sup>132</sup> and accounts for 7% of the GDP and 33% of the foreign exchange flows in India.

India has emerged as the main destination for outsourced services due to its competitive advantages of low wages and relatively educated work force. The cost advantage for India, compared to Western Europe and the USA has been at least 1:6. However, in recent years, this proportion has dropped to 1:3 as wages grew and technological advances now make it possible for many low value adding activities to be completed by computers. In this respect, India has failed to take advantage of the benefits brought by the investments in its service industry and has not moved up the value chain, with most of the sector still providing services for foreign companies. A high employee turnover rate, coupled by the government's inability to simplify the legislative framework to encourage entrepreneurship have prevented India from creating a sustainable development situation for the

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132 Associated France Press (2012) Global Fears shackle India's outsourcing job hoppers [available online at [http://articles.economictimes.indiatimes.com/2012-08-06/news/33065365\\_1\\_european-firms-global-economy-assochem](http://articles.economictimes.indiatimes.com/2012-08-06/news/33065365_1_european-firms-global-economy-assochem)]

industry. If wages continue to grow at the same rate as they have, the cost advantage for India will drop to 1:1.5 by 2015, making other destinations more attractive<sup>133</sup>.

Bulgaria is emerging to become one of the top destinations for outsourcing business operations. The country is ranked as number 6 in the list of “Top Outsourcing Countries” made by SourcingLine, just after India, Indonesia, Estonia, Singapore and China. Bulgaria has the advantage of being able to provide a work force that is considered to be very well skilled, willing to work on wages much lower than in Western Europe or the US. The salaries for similar jobs are six times lower in Bulgaria compared to the USA and the UK and three times lower than the Czech Republic. Other important factors are related to the excellent foreign language training of the work force and the existence of established know how centres and universities that will continue to provide a constant stream of educated labour and will encourage the development of value adding activities.

The Bulgarian legislative framework is harmonized with EU legislation, giving investors the same securities and protection as any EU country but the corporate tax is the lowest in the EU, having been cut from 19.5% to only 10%. Furthermore, Bulgaria enjoys a geographical advantage, being situated in a time zone that is a maximum of two hours ahead of any major European city<sup>134</sup>.

A wave of mergers and acquisitions in the outsourcing industry in Latin America and the Caribbean underscores a rapid expansion of the outsourcing industry. The number of jobs in the business process outsourcing industry is estimated at 300,000 across the region with various countries focusing on specific activities<sup>135</sup>. One of the first companies to move to the region has been the Caribbean Data Service group. The group has established a data processing centre for American Airlines in Barbados, choosing the country because of its proximity, high educational achievement and stability. The centre was successful during the 1980s and the 1990s but it failed to compete with the technology enabled by the internet. Another factor in its failure to develop in recent years is related to the high turnover rate of the employees. As the candidates are mostly interested in a temporary job and gaining IT experience, the company experienced low return rates as it spent important amounts of money in training staff that would only work for a short time.

Antigua and Barbuda focused on the software industry, creating an internet gambling sector that employed about 10% of the labour force in 2000 and led to the creation of over 100 companies. However, most of the gambling was done by US consumers and once the United States restricted

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133 Mitra, S., (2008) The coming death of Indian Outsourcing, Forbes [online available at [http://www.forbes.com/2008/02/29/mitra-india-outsourcing-tech-enter-cx\\_sm\\_0229outsourcing.html](http://www.forbes.com/2008/02/29/mitra-india-outsourcing-tech-enter-cx_sm_0229outsourcing.html)]

134 Ministry of Foreign Affairs of Denmark (2012) Sector Reports: Outsourcing Sector Bulgaria [online available at [http://bulgarien.um.dk/en/~media/Bulgarien/Documents/Sector%20reports%20May%202012/Sectoranalyses\\_Outourcing.ashx](http://bulgarien.um.dk/en/~media/Bulgarien/Documents/Sector%20reports%20May%202012/Sectoranalyses_Outourcing.ashx)]

135 Peters, P., (n.y.) The Nearshore beckons [online available at [http://www.zagadaexchange.com/userfiles/downloads/TheNearshoreBeckons\\_PP.pdf](http://www.zagadaexchange.com/userfiles/downloads/TheNearshoreBeckons_PP.pdf)]

Internet gambling in 2003, the number of companies went down to 30 and the revenues of the sector have dramatically shrunk<sup>136</sup>.

Jamaica is another country that has taken the lead on IT development. The Technology Innovation Centre at the University of Technology in Jamaica has proved to be an incubator for technology enterprises, helping the launch of 26 companies and working on an Investment Network to help small businesses acquire financing. This has helped the country by offering Jamaican companies access to software programmes that are modified to suit their needs and by giving programmers access to source codes and open source softwares. Jamaica has managed to promote itself as a leading hub for outsourcing data and IT operations by emphasising its proximity to the US market, its English speaking labour force, sophisticated telecommunication infrastructure and stable political environment which is eager to provide support to the sector. Many of the IT centres have received subsidies from the government in order to boost employment<sup>137</sup>.

### Relevance of the sector

There are no direct statistics on the size of back-office operations in Curacao, though activities concern accounting, IT, call centres and other business services which can be transposed outside of the main centre of operation of multinational. The company Curacao Technology Exchange (CTEX) completed a substantial investment in the establishment of a state-of-the art data centre in Curacao and mobilized an initial USD 20 million from local investors (industrial and financial sectors) to build a complex housing large computer servers and dedicated to be a high security, 24/7 data centre for international companies operating in the region.

The selection of Curacao as the destination of this investment was primarily motivated by its “exceptional” connectivity (5 major sub-sea cables, 2 more projected, that the island is connected to), to the “legal” security brought by the relationship with the Netherlands, to the fact of being outside the major hurricane belt (unless weather patterns change this), to the island’s multiculturalism, and to fiscal incentives / fiscal benefits. The first phase of the project will create 70 direct jobs with substantial spill-over effects expected. The most pressing issue for the successful implementation is related to the availability of skilled human resources. Improving the funding of new enterprises and reducing red tape for entrepreneurs were mentioned as broad factors required for a successful development of the sector in Curacao.

Back office operations could be a major determinant of employment creation, as has been witnessed in many other countries worldwide. The location of such operations is usually offshore, thereby limiting the direct economic benefits which can be derived from promoting industrial sectors (fiscal contributions in particular).

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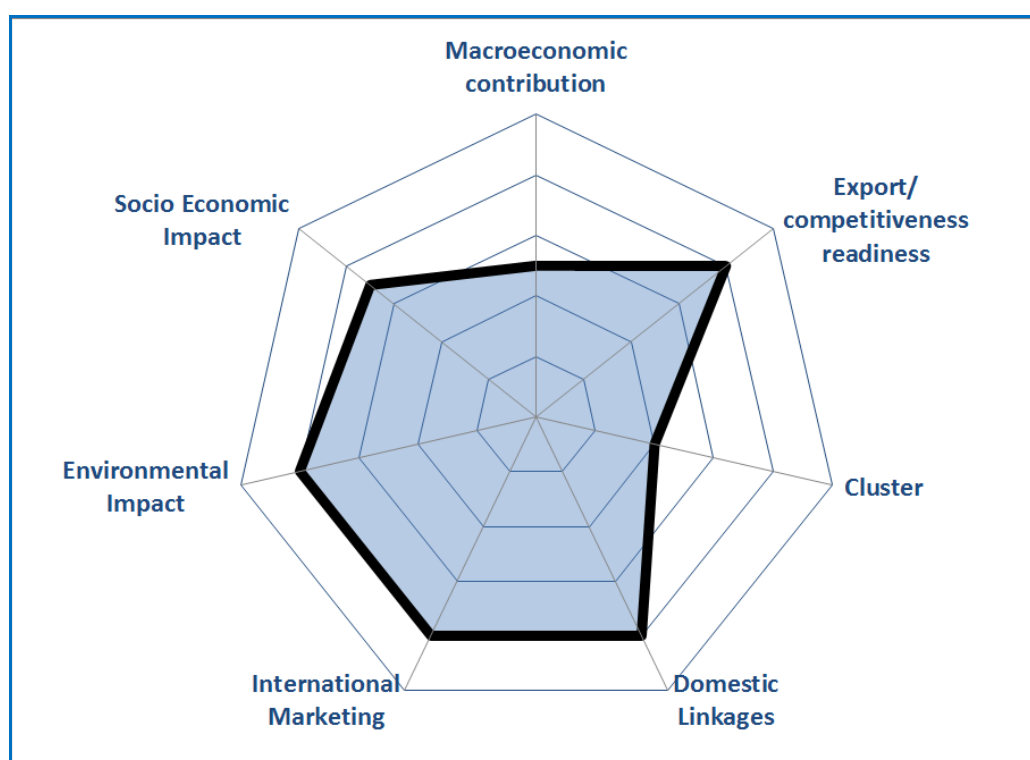
136 Erikson, D.P., (2008) Beyond Tourism: the future of the service industry in the Caribbean, The Centre for International Governance Innovation, Caribbean Paper No. 3

137 Investing in Jamaica's ICT Industry (2011) [online available at [http://www.jamaicatradeandinvest.org/documents/ICT\\_Jamaica\\_Brochure.pdf](http://www.jamaicatradeandinvest.org/documents/ICT_Jamaica_Brochure.pdf) ]

### Evaluation of the back-office sector in Terms of Potential for Growth

The summary of the analysis of the sector, which was undertaken based on stakeholder consultations, reveal that back office business operations could be an important contributor to social and employment goals, in particular through the employment of semi-skilled labour and skilled labour. Companies are export ready in the sector since these are already competing and the international market demand is favourable for such services, even if the rates of growth witnessed in the past are not expected to be sustained. The development of the sector would bring with it some additional infrastructural benefits to the wider economy. However, the overall direct contribution to the economy is expected to be limited due in part to the relatively small scale of the sector and the limited fiscal contributions it may bring. The results are summarised in Figure 59.

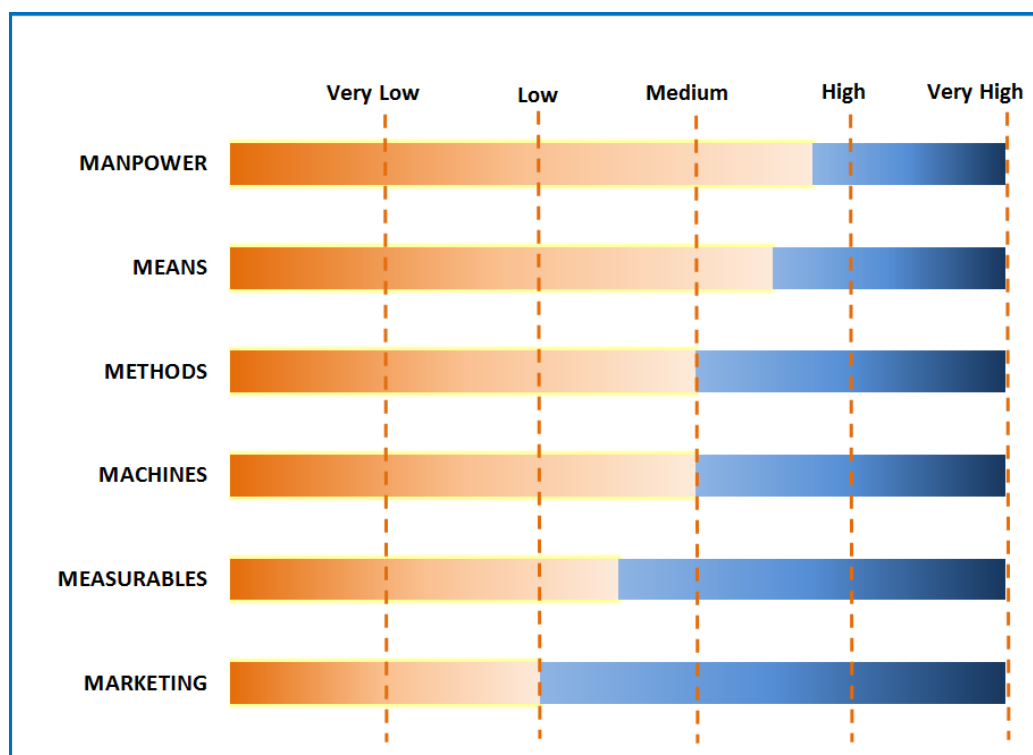
Figure 59 Contribution of back office operations to Curacao



Source: Authors analysis

The sectoral analysis revealed the existence of a strong potential given existing conditions in Curacao. In particular the manpower was considered positive to support the industry and would need only moderate effort to improve endowments for the sector. The investments made in the sector are also positive, though there remains room for continued efforts in this regard. Finally, the current management system (means) and technology (machines) in place are supportive of the sector. However, past performance and growing rivalry and competition from other low cost/well skilled centres are causes for concern. The overall 6M analysis of the sector is presented in Figure 60.

Figure 60 Summary of Analysis of Back-Office Sector



Source: Authors analysis

## Conclusion

The evaluation of this sector as one to be promoted in the LT Strategy for Curacao has revealed that the sector does have a strong potential in part because of its current technological infrastructure, its attractive low-taxes fiscal regime and the stability and security of the policy environment. The overall contribution to Curacao would be non-negligible and could have significant spill over effects. The outlook for outsourcing of operations and back office operations remains positive, although competition is high and likely to increase with time.

### *g. Space Travel*

#### **Background**

The space travel sector would be an innovative sector for Curacao to explore and on in which there is no past performance to rely on for analysis, since there are currently no commercial space tourism operations in the world. There are however spaceports used to launch satellites.

We provide a short overview of the existing competitors in this area and provide an assessment of whether, *ex ante*, it appears beneficial for Curacao to support this sector and identify strengths and weaknesses currently existing in Curacao for promoting this sector<sup>138</sup>.

Virgin Galactic, a company founded in 2004 within Virgin Group is one of the most prominent among the new space tourism companies. It aims to provide by the end of 2013 space flights to individuals at a cost of \$200,000 each. Based on the prototype SpaceShipOne, the new generation of spacecraft created by the company, the SpaceShipTwo (SS2) aircraft will take off from a spaceport built in New Mexico, USA, carry six passengers and two pilots, to a point about 50,000ft (15,240m) above sea level before the SST2 rockets into space. Passengers on board of SS2 will be experiencing approximately six minutes of weightlessness during what will be a two-hour end-to-end flight.

According to Virgin Galactic, 529 people have already signed up for space tourism (paying a \$10 million in deposits), which would represent over \$100 million in future revenue. The company has already announced that a second type of aircraft (WhiteKnightTwo) which will help launch SS2 into space will also be used for a new launch vehicle - LauncherOne - which will take small satellites into space for around a tenth of the present cost.

In February 2007, officials from Virgin and NASA signed a memorandum of understanding to explore the potential for collaboration. In 2009, Abu Dhabi's Aabar Group acquired 32 percent of Virgin Galactic space-tourism subsidiary from Branson's Virgin Group. Under the deal the two companies agreed that Abu Dhabi would gain exclusive regional rights, subject to receipt of regulatory clearances, to host Virgin Galactic tourism and scientific research space flights.

Virgin Galactic is not the only one planning to take tourists on a space trip. XCOR Aerospace, a company based in Mojave, California and wet-leased by KLM Royal Dutch Airlines, has more than 100 reservations for a \$95,000 seat on its small space plane, which will have just two seats — one for the pilot and one for the passenger. The group named, Space Expedition Curaçao (SXC) aims to take passengers from the Caribbean island of Curacao on one-hour flights into space. At a later stage, they intend to provide commercial flights that will make every city on Earth within two hours' reach. XCOR estimates that it will begin flying from 2013.

Space Adventures, Ltd., another USA-based space tourism company offers \$110,000 seats and has already signed up more than 200 people. Its partner, Armadillo Aerospace, plans to build an automated spacecraft (i.e. without pilot) that can take up two people at a time.

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138 The sources used in this section are: Chang, K. (2012) Booking a Flight to Space, With Travel Insurance, in *The New York Times*, January 3; Longman, J. (2012) To Infinity and Beyond: Investing in Space Travel, on *CNBC.com*, February 14; McGinley, S. (2012) Abu Dhabi-backed Virgin Galactic eyes revenue of US\$500m a year, in *Arabian Business.com*, May 1; Travel Bite (2011) Allianz to offer space travel insurance, in *Travel Bite*, November 21; Woodman, P. (2012) Branson confirms he'll be aboard first Virgin space flight, in *The Independent*, July 11

Company websites: [www.virgingalactic.com](http://www.virgingalactic.com), [www.xcor.com](http://www.xcor.com) and [www.spaceadventures.com](http://www.spaceadventures.com)

Allianz, an important player on the market for Non-Life and Life insurance announced recently that it would offer insurance to Virgin Galactic customers to cover a range of possible problems, including last-minute cancellations and coverage for medical issues before or after the flight.

Mostly important, all three companies, Virgin Galactic, XCOR and Space Adventures refund almost all of the deposit if someone wants to cancel their trip.

### ***Relevance of the sector***

As mentioned earlier, this sector is not yet in existence in Curacao and therefore cannot be known as to what it could contribute to the country. It might nevertheless be supposed that employment for nationals would be limited given the technical nature of the sector, and that its contribution to fiscal revenues and GDP would also be limited. It may however have indirect spillover effects such as promoting knowledge on Curacao and may lead to tourism if spin-off industries are created, such as a space museum or space training centre.

A study was conducted by Futron<sup>139</sup> on the commercial viability for establishing a spaceport in Curacao. It notes the growing worldwide interest in establishing such spaceports and against projections of the world market, makes assumptions as to the market share which Curacao might capture in the medium term and the likely revenue generated from such activities. It forecasts that the suborbital space tourism market will reach 1,200 launches per year by 2020. The study then estimates that Curacao would be in a position to capture between 8% and 20% of the world market by that same year, though it is unclear in the study how the estimation has been derived, and it also does not take into account the emergence of other spaceports which are already well established. The study provides an optimistic scenario (called “baseline study”) on the economic contribution that could be made from the spaceport. It estimates that by 2020, the spaceport and tourism activities could generate \$32.8 million and contribute to 231 jobs (a further \$81 million could be made as revenue for the operator). A less optimistic scenario, forecasts \$13.2 million of economic benefits to Curacao, and the creation of 85 jobs. The study finds that small orbital launches of satellites would not be a viable market for Curacao. The methodology and databases are internal to Futron and therefore the calculations and results could not be verified.

### **Evaluation of the Space Sector in Terms of Potential for Growth**

The evaluation of the commercial space project has been carried out based on the expected outcome of the sector if it were to become successful. Figure 61 plots the potential contribution that the sector might make to Curacao in the various criterion used for other sectors. As can be seen, it scores very low in all areas with the exception of international marketing, where it seems that outlook for demand seems positive. According to the Futron study, the contribution to GDP may be quite significant,

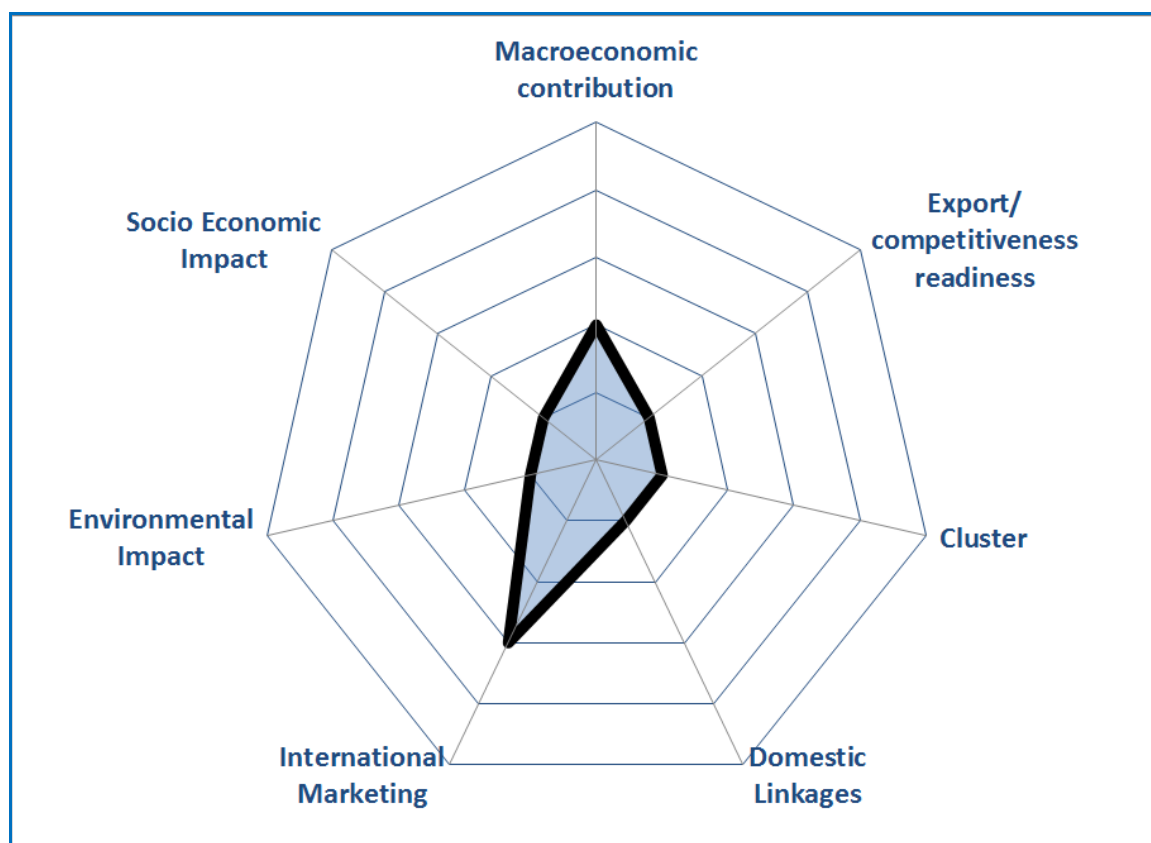
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<sup>139</sup> Futron (2009) Launch forecast for and economic benefit of a curacao spaceport, October 19.



though these figures assume that Curacao captures a large share of the world market, something which would not be in any way similar to any other sector in which Curacao operates in. The estimates on employment do not distinguish between foreign and local employees, but we retain our assumption that mainly foreign employees would be necessary. Other indicators, such as domestic linkages, are considered at best very weak. The overall assessment is that this would not build on any existing industry and it would be built on a very risky “picking winners” approach.

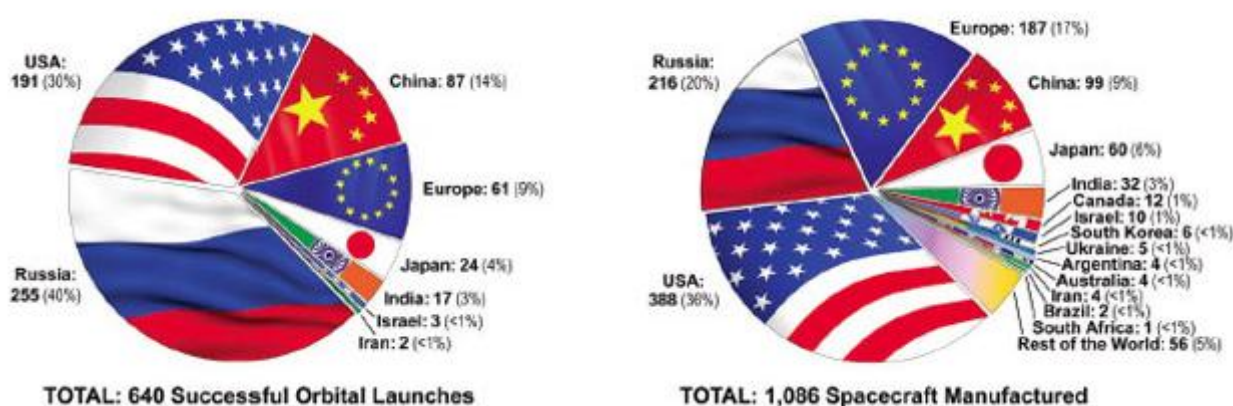
Figure 61 Potential contribution of Commercial Space programme to Curacao



Source: Authors analysis

According to the ranking produced by Futron in its publication Space Competitiveness Index, emerging spaceports from emerging nations include Argentina, Australia, Iran, South Africa and the Ukraine. Figure 62 below indicates that the largest market is by far the US but that its competitiveness is declining vis-à-vis emerging nations. The company notes that Brazil has increased funding, expanded its partnerships, and laid plans for a new launch vehicle. India was reported as improving its space-related technical education, and working towards manufacturing all parts of the next generation of launch vehicles. The competition from mature markets and emergence of large emerging market economies will increase the difficulties faced by Curacao in establishing itself as a dominant force (8-20% of market share) in the world market.

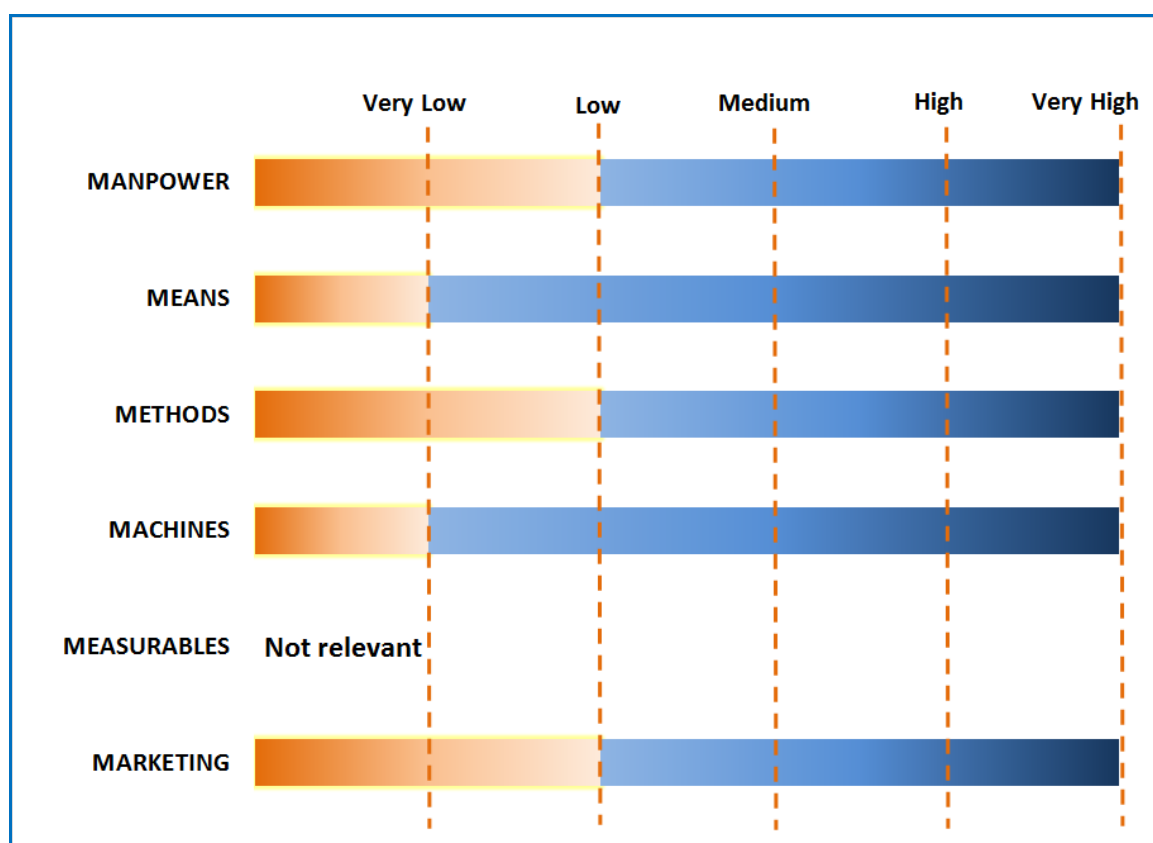
Figure 62 Orbital Launch and Spacecraft Manufacturing Trends, 2002-2011



Source: <http://spaceref.biz/2012/08/futron-releases-2012-space-competitiveness-index.html>

Figure 63 provides an assessment of how the sector may be able to perform based on existing resources and institutions in Curacao. Again, the results are poor since there has been no training, no investment nor any know-how accumulated in this sector. All areas of the 6Ms analysis score between very low and low.

Figure 63 Readiness of Curacao for Commercial Space Sector



Source: Authors analysis

## Conclusion

Based on the analysis gathered from competitors, and the existing endowments of Curacao, the commercial space programme can be seen as a very risky enterprise, with relatively low possible gains for the country as a whole. According to the only feasibility conducted however, the results from the space programme might be significant (generating between US\$ 13 and 32 million by 2020). The Futron study estimated that the benefits arising from establishing a spaceport in Curacao would accrue predominately to the private operator. However, a more detailed study is required to judge the results. This study would need greater transparency on the assumptions made, the underlying economic models used and the forecasts of competitor spaceports, which are significant worldwide.

The linkages to other sectors are believed to be minimal and there would be no possibility to build on any existing clusters to develop this sector. It would require leapfrogging in technology, human resources and investments, in order to compete with other rivals. The team believes that at this stage, any commercial space programme should be initiated and supported by purely commercial means, and utilise already scarce public resources to support less uncertain projects. The fact that the private operator would be the party that stands most to gain from the establishment of a spaceport, then it would also give some strong argument to promote venture capital and other financial instruments to support the space project and use public funds for other projects that can generate a higher socio-economic impact. Based on the most recent information available in March 2013, it would appear that the plan to erect the spaceport is currently abandoned.

### *h. Logistical services related to high value products*

#### **Background to trade in high value products**

Due to its high domestic labour costs, low volume of trade, relatively scarce land, trade in high value added goods, as opposed to low cost goods, seems to be a natural strategy to focus on for Curacao. At the Airport City, there already some storing, sorting, packaging and exporting activities related to some high value added products although the size of operations remains limited. The current analysis will be devoted to precious stones and (non-generic) pharmaceutical products, although it could be extended to spare parts, art collections and precious materials.

#### **- Precious Stones**

Precious Stones and Metals are appreciated not just for their consumption utility but also, increasingly, for their investment value. Recent studies by Capgemini (2010) and Barclays (2012) show that high-net-worth individuals are interested in investing in real assets like gemstones, precious metals, high-end jewellery, coins and stamps as they are perceived to have a high intrinsic value and are seen as a less risky investment, especially during times of crisis. Indeed, the returns rates for investors who bought precious stones and metals have been well above the return rates for bonds and stocks. Over the period between 1999 and 2010, the average annual increase in value has been of 6.4% for white

diamonds, 6.8% for other gems<sup>140</sup> and over 11% for gold while stock and bonds have had recorded averaged returns of -0.1% and 3.3% respectively<sup>141</sup>.

This explains why the market for precious stones is the second most valued market in the trade of minerals and metal commodities after iron and steel. At \$74 billion a year, the value of trade in precious stones is greater than that of aluminium and copper ores and metals combined (the \$74 billion per annum figure does not include the value of trade in precious metals, the value of gold traded is estimated at a further \$70 billion per annum)<sup>142</sup>.

The United States and Hong Kong are the most important actors in the trade of precious stones and metals, each of them accounting for close to 15% of the total traded volume<sup>143</sup>. It is important to note that certain hubs around the world account for an important slice of the trade in precious stones, especially when compared with their share in other sectors. Antwerp in Belgium, for example, is the place where 5% of the world's precious stones are being bought and sold. However, established trade hubs like Antwerp are seeing their position threatened by competitors who are eager to increase their share in the sector. In recent years, a number of high profile companies, mostly Indian, have relocated from Antwerp to Dubai. Other important relocation include that of De Beers' Diamond Trading Company unit from London to Botswana, making Gabarone, alongside Dubai, one of the major distribution centres for rough precious stones. The main reason behind these moves are related to the number of regulations that affect the sector in the established trading hubs but also to an increase in the controls carried out by tax authorities. Furthermore, a lower taxation level in the countries that are promoting themselves as new trade hubs have convinced investors to relocate their business. India's 2 percent import duty on polished diamonds has had a severe impact on the country's capacity to attract foreign companies to operate or sell to the domestic market<sup>144</sup>.

Observing the value of the stones traded in various hubs around the world, there is a clear difference between the value of trade in rough stones and the value of refined stones and jewels. The presence of cutting and finishing facilities enable the development of a jewellery industry and of other value-adding activities like the trade of recuts and high-end goods<sup>145</sup>. To take advantage of this, the Belgian government has launched 'Project 2020' aimed at making Antwerp a leading trading hub for precious stones and the world's leading diamond business centre. The plan focuses on securing new markets, developing a 'Diamonds from Antwerp' brand, launching an electronic trading platform and developing

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140 The figure for other gems refers to the period between 2003 and 2010

141 Renneboog, L., Spaenjers, C., (2010) Hard Assets: The Returns on Rare Diamonds and Gems [online available at [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1845446](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1845446)]

142 Radetzki, M., (2008) A Handbook of Primary Commodities in the Global Economy, Cambridge University Press

143 International Trade Centre figures for 2011

144 Krawitz, A., (2012) The World's Leading Diamond Hub

145 Davis, G., (2010) Trade in Mineral Resources, WTO Economics and Statistics Division [online available at [http://www.wto.org/english/res\\_e/reser\\_e/ersd201001\\_e.pdf](http://www.wto.org/english/res_e/reser_e/ersd201001_e.pdf)]

a jewellery wholesale market while also increasing research done at the Diamond, Jewellery & Management Institute and launching an International Diamond Data Centre<sup>146</sup>.

In this respect, Belgium correctly identifies the factors that influence the industry. Adequate facilities, the development of a jewellery industry or of other value adding activities and skilled labour force add to the chances of the sector to successfully develop. However, Belgium does not plan to change the framework regulating trade in precious stones, making other trading hubs that are less regulated a more attractive destination for investors and traders.

#### - **Pharmaceutical products**

As the date that the patents for pharmaceutical products expires, companies look at ways to reduce costs and develop new drugs to boost income. It is estimated that in 2011 alone, the annual sales of the pharmaceutical industry was close to US\$ 50 billion for drugs whose patents expired<sup>147</sup>. As the 'patent cliff' approaches, the major pharmaceutical companies are repositioning themselves, either by diversifying their products or by investing in research and development to develop new drugs. In order to do this, they are trying to make their existing products more cost effective and are looking for ways to improve the profitability of their sales without increasing prices. This situation provides some important opportunities in the pharmaceutical industry, particularly in the R&D sector and the Active Pharmaceutical Ingredient (API) for essential medicines manufacturing.

To produce any drugs, pharmaceutical companies need to have the necessary active ingredients. The production of API represents an substantial opportunity in the industry as the profit margin are between 20% and 30% as manufacturers can produce up to fifty different ingredients in a single plant with adaptive equipment. In 2005 the world market for API was worth US\$ 76 billion and was expected to continue to grow at a rate of 8.2%<sup>148</sup>. As companies are looking at cutting costs, they have relocated many of their API manufacturing centres in countries where the workforce is cheaper than the Western states. The API industry in India and China have experienced double digit annual increases and export at least three quarters of their API production. While Italy still remains the world market leader in APIs destined to sectors such as cardiovascular or the central nervous system, China leads in anti-infective APIs with approximately 43% of world market share.

The main factors driving the growth of the Indian and Chinese industries are related low cost of production, a highly skilled working force, the possibility of easily setting up laboratories and an

146 Rosy Blue Report to Society, 2010-2011 (2011) available at [\[http://www.unglobalcompact.org/system/attachments/13195/original/Report\\_to\\_Society.pdf?1322677206\]](http://www.unglobalcompact.org/system/attachments/13195/original/Report_to_Society.pdf?1322677206)

147 Wilsong, D., (2011) Drugs Firms face billion in losses in '11 as patents ends, The New York Times [ available at <http://www.nytimes.com/2011/03/07/business/07drug.html?pagewanted=all> ]

148 Bumpas, J., Betsch, E, (2009) Exploratory Study on Active Pharmaceutical Ingredients Manufacturing for Essential Medicines, International Bank For Reconstruction and Development [available at [http://www.unido.org/fileadmin/user\\_media/Services/PSD/BEP/APIExploratoryStudy.pdf](http://www.unido.org/fileadmin/user_media/Services/PSD/BEP/APIExploratoryStudy.pdf) ]

increase in the protection of IPR following its accession to the WTO (and its application of WTO rules)<sup>149</sup>.

Another fast growing industry is that of the Research and Development Pharmaceutical sector. Around 28 billion Euro has been invested in pharmaceutical R&D in Europe alone. However, while the sector grew between 2010 and 2011 by only 2.6% in Europe and 3.6% in the US, the Brazilian market recorded a growth of 20% and the Chinese one 21.9%<sup>150</sup>.

However, it is important to note that most of the foreign investment in the R&D sector were not outsourcing contracts as big companies did not rely on independent businesses to do the research for them. Instead, they relocated their own laboratories and even their own highly trained scientists and researchers. This has been done to minimise risk and to conduct the first test processing on their own. Large pharmaceutical companies cannot afford to produce any errors in the development of new products as these errors can prove very expensive. The cost of developing a new drug (also factoring the cost of the drugs that fail to make it to the market) has reached an average of US\$ 1.7 billion. Furthermore, small research firms do not have the financial or technical resources to either get marketing approval from the regulatory agents or market their product. The big pharmaceutical companies continue to keep these processes in-house, since they have the most financial and highly skilled labour resources at their disposal for this specific development<sup>151</sup>.

### Significance of the sector

The sector has been heavily promoted by the Curacao Airport Authorities in their master plan for 2008-2012<sup>152</sup>, as well as the Airport City Concept<sup>153</sup>. The plans have been endorsed by the business community, even if the actual sectors and level of ambition which might be reached are sometimes disputed. The sector can only thrive on the basis of a well-functioning infrastructure which facilitates logistics, such as efficiency and predictability in customs procedures; reduction of bureaucratic procedures, a secure environment; low taxes and access to markets. The major investment in the Airport City Concept, where this sector would most likely be located, will have an important impact on job creation, and wealth creation. The specialised nature of jobs could also be a driver for the return of the diaspora which has been a desire of successive governments in Curacao/Netherlands Antilles. The proposed activities that might be attracted by the Airport city are drawn in Figure 64. It could attract a range of activities, from services to light manufacturing and green technologies. The concept places particular emphasis on the need for clean technologies.

149 Sakhtivel, N., (2011) Value Creation in the Indian Pharmaceutical Industry: A regression analysis, Journal of Arts Science and Commerce, Volume II, issue 1, January 2011

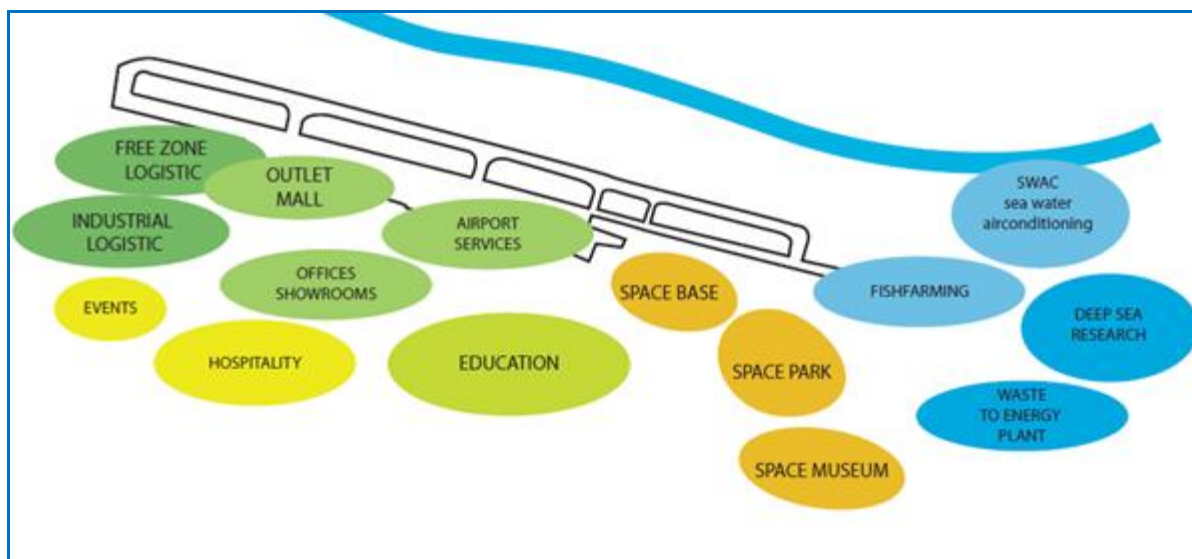
150 European Federation of Pharmaceutical Industries and Associations (2012) The Pharmaceutical Industry in Figures [available at <http://www.efpia.eu/sites/www.efpia.eu/files/EFPIA%20Figures%202012%20Final.pdf>]

151 Castner, M., Hayes, J., Shankle, D., (2007) Global Value Chains, shift in the configurations since 1995, Duke University [available at <http://www.duke.edu/web/soc142/team2/shifts.html>]

152 CAH, Strategic Master Plan 2008-12, <http://www.ca-holding.com/master-plan-cah>

153 CAH (2012) Airport City Curacao, March, [http://www.ca-holding.com/files/airport\\_city\\_curacao\\_120301\\_1331565763.pdf](http://www.ca-holding.com/files/airport_city_curacao_120301_1331565763.pdf)

Figure 64 Airport City Development Concept



Source: CAH (2012) Airport City Curacao, March

Most projects located in the e-zone near the Airport City are exempt from import duties and VAT on imported goods intended for the operation of the business and benefit from a reduced profit tax rate of at least 2%, exemption from property tax for ten years, exemption from usage tax, exemption from income tax for dividends paid within two years after the fiscal year in which the profits are obtained<sup>154</sup>.

The Curacao Logistical Hub Plan for 2016, lists a number of actions which are needed in order launch Curacao as “one of the top integrated logistical hubs offering trusted, value-generating services across the following areas: international financial services, information transfer, international trade, and sea and airport services”<sup>155</sup>. The list of proposals in the plan range from government sector services, such as reforming customs, to private sector driven services. Although no prioritisation of activities are given, the diagnostic of the plan seems to have captured the stakeholders views and the proposals for support in niche priority areas appear well founded.

### Sectoral analysis

An evaluation was made of the potential contribution that the sector could have for Curacao. It is not expected that it would have a large direct impact on the economy owing to the fact that the sector will be relatively small and that the sector is expected to be operating through the e-zone. Currently there are no enterprises operating in the e-zones which currently are engaged in logistic activities, so that the relative export readiness is weak. The potential for a cluster approach to development is also compromised given the nature of the business and its operating environment. However there is a potential to develop spin-offs, even though space limitation and a limitation on human resources is likely to prevent large scale developments. The international outlook is however positive and the environmental risks are limited. Finally, the impact on job creation may be large, although some

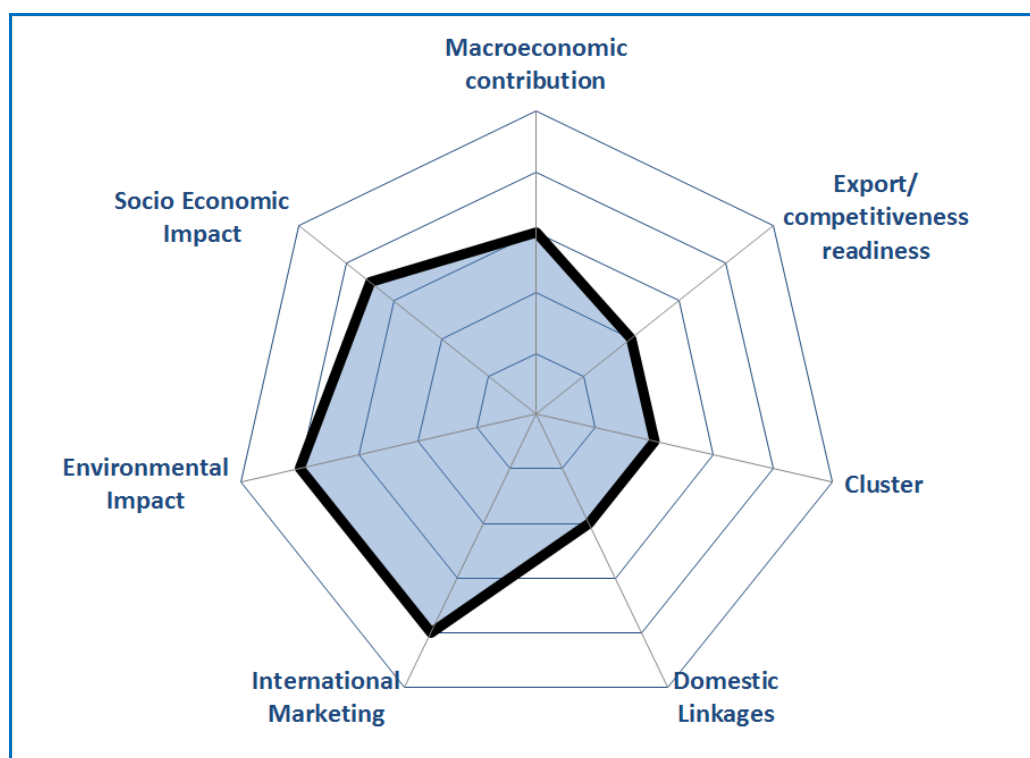
154 CAH (2012) Airport City Curacao, March

155 Curacao Logistical Hub Plan 2016, vision statement



specialised skills would need to be sourced from abroad. The summary results are presented in Figure 65.

Figure 65 Contribution of the Sector to Curacao

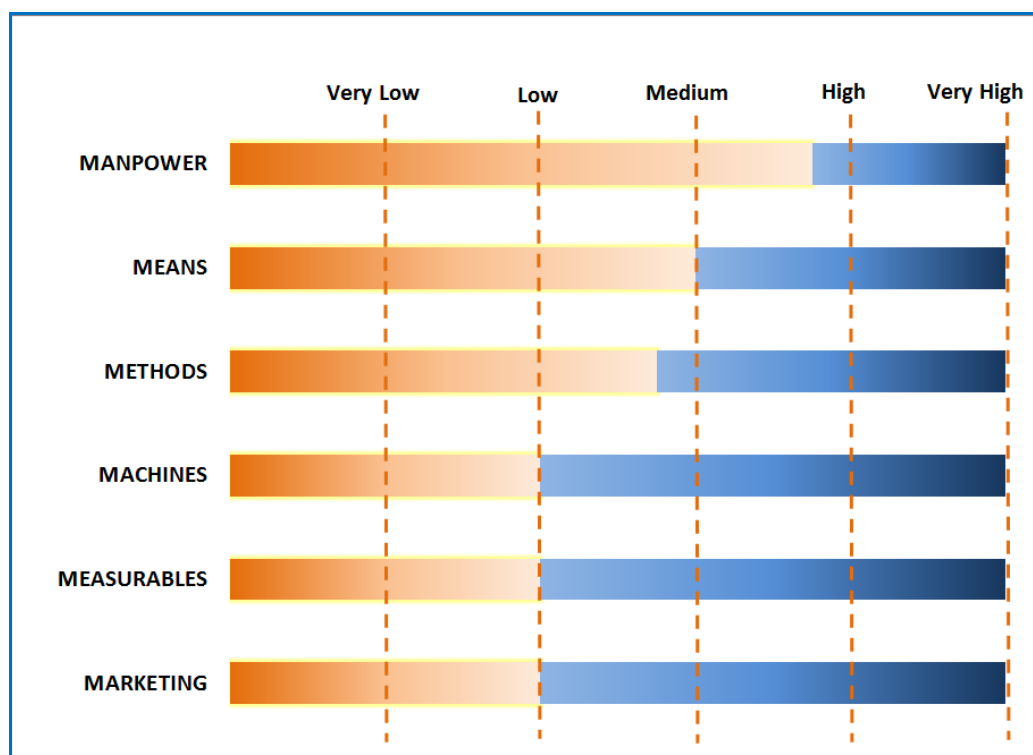


Source: Authors analysis

The assessment of the sector in terms of the 6M approach reveals that Curacao is well prepared in terms of manpower and means, but focused efforts would be needed to redress weaknesses in the other pillars of the assessment. In particular, the CAH seems understaffed and overstretched. The Political crisis is also likely to slowdown development. Greater synergies are needed to be built between local (domestic) industries and potential investors in the Airport City, investment is needed, particularly related to the importation of technology. A stronger technical university which can support R&D activities will also be required. Finally, competition is high in the Caribbean alone, where countries have been also working towards creating logistical hubs, and which are better served by shipping routes and airline networks. The summary results are presented in Figure 66.



Figure 66 Readiness of Curacao in logistics



Source: Authors analysis

## Conclusion

The sector has great potential in terms of attracting foreign (and domestic) investment and raising skilled and technical employment levels on the island. It also would strengthen the transshipment and other hub activities currently being supported by the Government in Curacao. It would have wider indirect effects on the provision of services related to logistics (financial, insurance, business support, IT, etc.). There should be a concerted effort to address some of the weaknesses related to methods and technology, highlighted above, as well as the need to build strong supporting industries locally which would create stronger linkages between the developments of the logistical hub and the wider economy.

### *i. Clean Energy Sectors*

#### **Background to clean energy**

Outside of the potential sectors already targeted by the Airport City Concept, and which include R&D and production of clean technologies related to such areas as deep sea air conditioning and waste to energy plants (see section i.2 above), the sectors which have been considered are wind energy and solar power.

### - **Wind Energy**

The energy produced by wind turbines represents a clean and attractive energy source for those countries that are situated in regions with the required wind regimes. The Caribbean has the potential of significantly increasing its electricity production as the wind conditions are ideal for the exploitation of wind energy. Looking at the local circumstances, it is estimated that wind energy could provide more than 10% of the electricity of many of the Caribbean countries by 2020. Wind speeds are greatest in the eastern Caribbean and lower in the West and the Bahamas. Most of the coastal sites tend to have great diurnal variations in wind speed with the strongest winds occurring between 9 AM to 4 PM. However, islands like Aruba, Bonaire and Curacao have extended regions with low diurnal variations and high wind speeds (in excess of 8m/s at a height of at least 20 m)<sup>156</sup>. These wind conditions give the islands the opportunity to produce wind energy in a much more efficient way than other countries. Under these contributions, a utility wind turbine in the MW class would produce energy 50 to 100% more efficiently than it would under normal European conditions. Currently Curacao produces 30Mw of energy from wind turbines.

A report by GIZ<sup>157</sup> identifies the biggest factors inhibiting the development of the exploitation of wind resources as being the lack of a coherent energy policy and the existence of electricity supply acts that guarantee the power providers a minimum rate of return on their investments (fuel surcharge) which gives no incentives to developers to encourage green energy.

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156 Wright, R.M., (2001) Wind energy development in the Caribbean in Renewable Energy, volume 24, Issues 3-4, November 2001, P. 439- p. 444

157 Scheutlich, T.M., (2011) Wind Power in the Caribbean: On-going and Planned Projects, German International Cooperation, Caribbean Renewable Energy development Programme [online available at [http://www.credp.org/Data/CAWEI\\_Wind\\_Survey\\_Report.pdf](http://www.credp.org/Data/CAWEI_Wind_Survey_Report.pdf) ]

Another important factor in the development of green energy is related to the finance side of the projects. Many countries cannot afford the full cost of building the infrastructure necessary for the implementation of these projects. The development of green energy sites is generally more expensive than classic energy plants and the higher cost of the energy produced means that it takes longer for developers to recover their investment. However, the availability of non-refundable funds or preferential loans for green investments represents an opportunity for central governments to finance their green projects in such a way that the projects would become economically attractive. The Climate Investment Funds, spearheaded by the World Bank, promotes the development of such projects by

#### Success Story: the Wigton Wind Farm (Jamaica)

The Petroleum Corporation of Jamaica (PCJ) invested into a wind farm with a capacity of 20.7 MW, boosting Jamaica's position as leading country in wind power utilization in the Caribbean region. After a lengthy process that started in 1995, the US\$ 25 million project led to the installation of 23 turbines of 900kW, saving the country US\$ 3.5 million a year in oil imports (value estimated for 2004), and avoiding 50,000 tons of CO<sub>2</sub> from being released in the atmosphere every year, bringing the country further economic benefits from the sale of certified emission reductions. The project had to overcome significant issues regarding land acquisition and funding (investment from PCJ, loan backed by the government and Dutch grant – 35% of turbine costs and equipment shipped from the Netherlands)

Source: German Agency for Technical Cooperation, (2004) Renewable energy sources in Latin America and the Caribbean: situation and policy proposals [online available at <http://www.eclac.cl/publicaciones/xml/9/14839/cl2132i.pdf> ]

funding and offering loans either for research related to their development or their actual implementation<sup>158</sup>. Another important opportunity, particularly for Latin America and the Caribbean, is the Energy and Climate Partnership for the Americas,

launched in 2009<sup>159</sup>. One of the first projects to receive funding under the partnership was a wind farm in Dominica aimed at installing small wind turbines and assessing their impact on the electricity grid in order to identify their impact on the distribution system. A second project was funded in Costa Rica for the establishment of a training and certification centre for professionals in energy-efficient technology and auditing procedures, promoting research that will benefit not only the country, but the region as a whole<sup>160</sup>.

A recent report published by the UNDP provides guidance on the financing options available for developing countries to support low-emission and climate resilient development. The range of climate finance sources is complex and includes ODA, new climate funds, private sector and capital market investment, and domestic government budgets.

158 Climate Investment Funds webpage: <http://www.climateinvestmentfunds.org/cif/designprocess>

159 Energy and Climate Partnership of the Americas: <http://ecpamericas.org/About-ECPA.aspx>

160 Coward, S., (2010) Dominica wind farm gets US funding [online available at <http://www.caribbeanpressreleases.com/articles/6153/1/Dominica-Wind-Farm-Gets-US-Funding/Page1.html> ]

The UNDP guidance sets out a roadmap approach for project developers and countries to follow to secure finance. Key to this approach is securing an optimal national policy mix for the promotion of investment. It should be noted that the policy mix, for example to develop renewable energy generation, will not be the same in each country. The existing regulatory and legislative controls vary from country to country across the Region; countries have different resources, challenges, needs and priorities. New regulatory instruments will be required; some existing policies (e.g. fossil fuel subsidies) will need to be changed before investment-support policies for renewable energy can be effectively implemented.

The selection of the most appropriate mix of public policies to catalyse investment for either low carbon urban sectors or climate resilience actions will be influenced by:

- Technology maturity (low carbon) and impact uncertainties (adaptation)
- Global market conditions for investment
- Country conditions
- Specific national barriers and challenges

Indeed, after the energy policy and the funding options, the availability of a trained work force is one of the most important factors in the development of the wind energy sector. The GIZ Report on the status of wind power projects in the Caribbean find that the wind power development in the region is not experiencing a lack of knowledge or information, the major factor affecting the development of the sector being the energy policy.

- **Solar Power**

As over 95% of the energy used in the Caribbean is the result of burning oil or gas, the recent peaks in prices have hit these countries particularly hard. The increase in energy prices has led to an increase in interest in renewable energy<sup>161</sup>. Besides wind energy, solar power represents a great opportunity for the area as it is situated in a region rich in sunlight throughout the year.

Solar energy has a strong potential in agriculture applications, such as crop dryers and water pumps for irrigation, as well as in industrial applications. Most of the solar energy currently used is used indirectly, through water heaters used especially in hotels and other tourism facilities. The harnessing of solar power to meet electricity demand is very limited around the region, particularly due to lack of available space. However, other factors inhibit the use of photovoltaic systems. One of them is the fear that the aesthetic of the environment will be affected and tourism will be discouraged (something which also applies to wind farms)<sup>162</sup>.

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161 Kho, J., (2009) A sunny new market for clean power: the Caribbean

162 Schwerin, A., Scheutlich, T.M. (2010) Analysis of the potential Solar energy Market in the Caribbean, German Agency for Technical Cooperation, Caribbean Renewable Energy development Programme

As in the case of the wind power sector, investment in solar energy is discouraged by the energy policies currently in place. Investment in other Caribbean islands was also inhibited by the inability of the power grid to use feed-in tariffs, though small producers and households will be able to sell to the grid in Curacao. However, the subsidies related to the production of solar panels by the US and China have helped to sharply reduce the price of the technology, and make it more affordable.

### ***Significance of the sector***

Aqualectra is responsible for the managing of two utilities, electricity and water. The entity is responsible for the production and distribution of power and water, as well as delivery of accompanying services. The utilities are public entities, though they seek to operate like businesses, with a strong sense of cost recovery and some element of profits being central to their business model. In 2009 the government became the sole shareholder of the company and established the Public Utilities Commission (PUC) to oversee the monopoly. The cost of energy on the island is still high, i.e., around US\$0.37/KWH, and the government is proposing to increase this to US\$0.42. There is currently a line loss of about 13% due mainly to old lines. The aim is to get the line losses down to 8%.

Curacao has been a pioneer of renewable energy with one of the first wind farms being established on the Island in 1957. The company is currently heavily dependent on fossil, but it is reviewing its production mix with the aim of moving towards a more sustainable energy combination.

The company has recently completed the construction of a wind farm that will provide 22% of the current energy requirement on the island. With the commissioning of this new wind farm, this will take the contribution of energy provided by wind energy to the national grid up to 40%. The company is also exploring the use of solar energy and natural gas. The latter is at a preliminary stage and seen as quite ambitious. A policy started in 2012 for small businesses and local people allowed to generate energy for wind or solar panels and feed in tariffs to sell to the grid.

### ***Analysis of the Sector***

The greatest weaknesses which were identified in the sector relate to the high labour costs; high cost of electricity, water and fuels; insufficient security in the supply of electricity; insufficient regulations in the energy sector; limited size of the labour market; the small captive market; inefficiencies in the supply of utility services; the absence of climate conscious building standards; and the inadequate physical planning that increases transportation costs.

Curacao's energy policy is one year old but is only partially capturing all the elements necessary to promote all aspects of an energy policy. The energy policy was seen by stakeholders to be geared towards middle and high income. World Bank and IMF reports suggest that utility should remain a state owned enterprise because capacity/utilisation is so low although the Government has been

cherry picking, by selling profitable parts and then keeping unprofitable parts under the ownership of the public sector.

Other recommendations made by stakeholders relating to improving the sector included:

- Increase water and electricity saving measures
- Need to create a new building law (which dates from 1935), which would stipulate more energy efficient technical norms for building
- Introduce an incentive regime to increase renewable energy
- Improve business opportunities related to waste management and renewable energies
- Implement an investment promotion agency in Curacao to promote clean energies and identify potential investors.
- There is a need to improve the institutional framework governing innovation and technology policies. In this respect the innovation centre is working towards this goal.

## Conclusion

The clean energy sector is an important sector, not just in the interest of climate mitigation policies but also in terms of finding solutions to the energy costs and reflecting on the inefficiencies of the current energy policies in Curacao. The sector is one which should be supported and where the weaknesses addressed above need to be tackled, and the opportunity presented in the background to the sector should be exploited.

### *j. Fishery Sector*

Capture fisheries and aquaculture supplied 148 million tonnes of fish in 2010 with an estimated value of US\$ 217.5 billion (88.6 million tonnes captured and 59.9 million tonnes supplied through aquaculture). The total supply of fish has increased from 145.3 million tonnes in 2009 and the estimates indicated a further increase in 2011 to 154 million tonnes<sup>163</sup>. Although the total amount of fish supplied has increased constantly in the last years, this is mostly due to an increase in the production in farmed food fish. From a production of 32.4 million tonnes in 2000, the estimates for 2011 show that aquaculture was responsible for 41.3% of the total fish supply, at 63.6 million tonnes. By comparisons, the total quantity of fish captured has remained relatively stable at around 90 million tonnes/year.

Fish and fishery products are among the most traded food commodities accounting for about 10 percent of total agricultural exports and 1 percent of world merchandise trade in value terms. Since

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163 Food and Agriculture Organizations, (2012) World Review of fisheries and aquaculture, FAO , p.3

1976, the value of world trade in fish and fishery products grew significantly from US\$8 billion to US\$102 billion in 2010 and it is estimated to have exceeded US\$125 billion in 2011. China is the largest exporter of fish and fishery products, responsible for 12% of the total world exports in 2010 (or about \$13.3 billion and estimated to have increased to US\$17.1 billion in 2011). Reprocessed imported raw material represents a growing share of China's exports (China is also the world third largest importer), the same situation being observed in other leading exporters, Thailand establishing itself as a processing centre of excellence. One exception is Viet Nam which grew to become the world fourth largest exporter (exported value of US\$6.2 billion in 2011) mostly due to an increase in its aquaculture industry. The European Union is the world's largest single market for imported fish and fish products, accounting for 40% of the total value of imports. The EU registered imports of US\$44.6 billion in 2010. If intraregional trade is excluded, the European Union imported fish and fishery products worth US\$23.7 billion from suppliers outside the EU. The EU is followed by the United States and Japan, two countries which are highly dependent on imports for 60 percent and 54 percent, respectively, of their fishery consumption<sup>164</sup>.

FAO estimates that the fishery sector provides livelihood and income for 55 million people engaged in the primary sector of fish production in 2010. The economic impact of the sector is even more extensive when we take into consideration the number of people involved in the processing industry. In the CARIFORUM States, fisheries account for up to 6% of GDP, without taking into consideration the processing and distribution aspects of the industry, and employ approximately 182,000. Furthermore, these figures do not include the contribution of the recreational fishery, which is a rapidly growing sub-sector closely linked to tourism. For example, The Bahamas estimate that recreational fisheries generate about US\$ 100 million in revenue each year<sup>165</sup>.

The UN Food and Agriculture Organization looks at the factors that influence the fishing industry and concludes that the most important ones to determine the level of success in the sector include<sup>166</sup>:

- **Governance structures:** Mahon *et al.* (2008) argue in favour of an interactive fisheries governance perspective, involving a dynamic and complex fish chain, leading from the resource and its supporting ecosystem to the global marketplace and the local consumer. The dynamics of this chain need to be balanced as the system responds to a variety of stimuli. To understand the needs of the industry, the interactions of the system need to be understood and the main stakeholders need to be involved in solving the problems that are affecting its development. As a result, the FAO places special emphasis on the need for collective access rights for fishing communities in order to encourage co-management.
- **Level of knowledge and information related to the existent fisheries situation:** A good understanding of the fishery industry's situation is needed to promote good governance. While

164 Food and Agriculture Organizations, (2012) World Review of fisheries and aquaculture, FAO , p.15-p25

165 Haughton, M., (n.y) Fisheries subsidy and the role of regional fisheries management organisations: the Caribbean experience [online available at <http://www.unep.ch/etu/Fisheries%20Meeting/submittedPapers/MiltonHaughton.pdf> ]

166 Salas, S., et al. (2011) Coastal Fisheries in Latin America and the Caribbean, FAO Fisheries and Aquaculture Technical Paper No.544

the general causes for the problems that the system is facing are known (overexploitation, habitat degradation, unintended catches and discards, etc.), the exact context in which these problems develop need to be analysed to provide the correct solutions. For example, it is important to know what resources and gears the fisheries use and whether they are involved in other activities as well (tourism, salt mining).

- **Adequacy of incentives:** The WTO argues that the implication of fishery subsidies depend exclusively on how well the sector is managed in the first place. According to WTO studies, under optimal management conditions, subsidies would have opposite effects to those intended, as they would lead to a reduction in the harvest, or they would be neutral and have no effect on the amount of the fish harvested. As a result, neither importers from a subsidizing country nor exporters to the subsidizing country would appear to have grounds for complaint to the WTO<sup>167</sup>. The WTO does, however, warn that subsidies can help to hide certain mismanagements of the sector and believes that the use of subsidies should be discouraged in order to allow the system to correct itself when possible and to make it easier to identify the areas where better legislation is needed.
- **Stock fluctuations:** Fishing stocks will fluctuate independently of fishing activities. Climatic phenomenon like the El Nino-Southern Oscillation will have an impact on the short term development of the fish stock while climate change will impact the stock's fluctuations on the long term. Although these types of variations cannot be prevented, good planning and appropriate actions can limit the damage that they can incur on the sector.
- **Level of coastal development:** The development level of the fishing communities determines the efficiency of their fisheries. Access to the latest technology (fishing gear, storage, trade information) can have an important impact on the development of the fisheries and their efficiency. Appropriate landing sites and, if needed, transport infrastructure from the landing sites to processing sites will also have an impact on the efficiency of the fishery industry.

According to Invest Curacao, a large number of people are gainfully employed full time or part time in the fishing industry in Curacao. It also reports that some people are also employed to build and repair fishing vessels, thus adding a considerable multiplier effect<sup>168</sup>. Others dispute this statement, with the fishing industry accounting for 1% or less of GDP. The sector significance is likely to be limited although it would have important socio-economic impact for those on lower wages. More importantly, the sector represents an opportunity in terms of vessel registration to be able to export fish products to the EU, as well as a potential sector to develop for tourism.

Nevertheless, without proper regulations to ensure that SPS standards are high, and that regulatory authorities can offer proper inspection of fish catches, the value added services associated with the fishery sector will be captured by the vessels from foreign investors, with few immediate benefits to the

167 Asche, F., Smith, M. D., (2010) Trade and Fisheries: key issues for the WTO, WTO Economic Research and Statistics division [online available at [http://www.wto.org/english/res\\_e/reser\\_e/ersd201003\\_e.pdf](http://www.wto.org/english/res_e/reser_e/ersd201003_e.pdf) ]

168 Statistics could not be found and statement made on <http://www.investcuracao.com/01e06.html>



Curacao economy. More importantly, the impact on the natural resources of Curacao, and in particular fish stocks can be severe if not well patrolled and regulated, something which requires investment and an institutional framework with a strong mandate and capacity, which are not currently present in Curacao. For this reason, the sector is not considered strategic at this moment in time.

#### **4. Conclusion: Summary of Sectoral Priorities for Curacao**

The sectoral analysis in section III has been focused on those sectors that currently make a significant contribution to economic output in Curacao or that would suggest a potential to increase economic output in Curacao, based on the feedback held with stakeholders and based on other economies facing similar resource endowment, institutional setting and geographic proximity to large markets.

The analysis of sectors was based on the existing and expected future policy environment and has been undertaken with a view to suggest ways in which the government can improvise the business-enabling environment and investment climate so as to foster entrepreneurship and private sector investment to boost the competitiveness and sustainability of these sectors. The analysis does not in anyway propose the “picking of winners” but rather create the necessary policy space to ensure that such industries can take shape and become internationally competitive.

Some industries are unlikely to ever become competitive, no matter what the government provides as infrastructure or what policies it implements, simply due to the nature of competition in those industries. This is the case for example of industries which compete on scale or price, or those with large externalities. Curacao is naturally better adapted to become competitive in industries where imperfect competition prevails and which can capitalize on its existing resource structure. As such, the classical sectors, such as the tourism and financial services industries remain sectors which are encouraged to remain a central focus of government action to support and improve the business environment. Other sectors, such as logistics, research and development, vessel registration, air auxiliary services, and cultural industries are natural spin-offs of existing industries but which are not yet strongly established and which require government assistance. Finally a third group of industries also have the potential to succeed but are not built on strong existing industries. These include the software development industry, clean energy and back-office operations.

As explored in the subsequent chapter IV, a number of recommended actions are proposed to create the necessary legal and institutional environment to ensure that these industries become competitive and sustainable. Competition is significant for a number of industries in these sectors which require adjustment to the current business environment in Curacao. The principle positive and negative factors affecting the highest potential industries are summarized in the table below. A more extensive list is provided in the body of the report.

**Summary of advantages and constraints in selected sectors**

Sectors	Pull factors	Push Factors
Tourism	<ul style="list-style-type: none"> <li>• Multilingual &amp; diverse culture</li> <li>• Building long-term skill base in the industry</li> <li>• Existence of Initiatives in training, community-based tourism and public awareness</li> <li>• Good year round climate</li> <li>• Interesting reefs – drop-offs, swim-throughs, etc.</li> <li>• Variety of beaches; national parks and scenic areas</li> <li>• Willemstad UNESCO World Heritage Site</li> <li>• Extensive road network in good condition</li> <li>• Modern cruise terminal and mega pier</li> <li>• Safe havens and moorings for yachts</li> <li>• Plentiful accommodation</li> <li>• Range of activities and attractions</li> <li>• Rich cultural heritage</li> </ul>	<ul style="list-style-type: none"> <li>• Shortage of trained personnel to meet growth demand.</li> <li>• Mismatch between pre-service training and industry needs.</li> <li>• Growing dependency on overseas workers may affect product character.</li> <li>• Rapid expansion of tourism may alienate locals due to traffic congestion, restrictions on access to amenities, etc.</li> <li>• Over-supply of accommodation.</li> <li>• Uncontrolled/illegal development.</li> </ul>
Cultural & Creative Industries	<ul style="list-style-type: none"> <li>• Curacao's has a rich cultural heritage.</li> <li>• Curacao enjoys UNESCO recognition as a World Heritage Site, making it only one of 17 sites recognized by UNESCO in the Caribbean.</li> <li>• Carnival is perhaps the most international event held in Curacao, although this faces competition from other carnivals in the Caribbean.</li> <li>• The cultural infrastructure has developed over the past decades, through its museums, galleries, publications, research, international conferences held locally, Kas di Kultura, Museo Tula and private galleries.</li> </ul>	<ul style="list-style-type: none"> <li>• No art school in Curacao.</li> <li>• Insufficient support to emerging artists to promote their talent, market it overseas, protect its copyrights and assist in the management of events/exhibitions/ concerts for such emerging artists. All promotion has to be done by private sector with no public sector support</li> <li>• Poor distribution channels; there is a private local craft market but no public craft market place. It is difficult to compete with products from China.</li> <li>• At present, many events are primarily geared to the local population, with few visitors coming from outside the country.</li> <li>• Insufficient synergies with tourism industry.</li> </ul>
Financial Services	<ul style="list-style-type: none"> <li>• Sophisticated financial system</li> </ul>	<ul style="list-style-type: none"> <li>• Limited competitiveness of the industry</li> </ul>

Sectors	Pull factors	Push Factors
	<ul style="list-style-type: none"> <li>• Favourable tax treaties</li> <li>• Rule of law</li> <li>• Signed tax treaties</li> </ul>	<ul style="list-style-type: none"> <li>• Threat of actions by the OECD countries.</li> <li>• Poor implementation of legislation does not facilitate the development of new products.</li> </ul>
Transportation Cluster	<ul style="list-style-type: none"> <li>• As one of the largest commercial dry-dock in the Caribbean, the Curaçao Dry-Dock (CDM) is well known in the region for the high quality of its services.</li> <li>• Curaçao Airport has an important strategic location, making the country an excellent distribution hub for several important regions.</li> </ul>	<ul style="list-style-type: none"> <li>• Obsolete equipments</li> <li>• Growing competition from harbors like Colon and Jamaica, which have upgraded their harbor infrastructure and activities to accommodate post-Panama container ships.</li> <li>• Obstacles in the registration and certification of ships, as well as in the inspection policy that were seen by stakeholders as the most obstructive and bureaucratic</li> <li>• In the case of transshipment, inherent weaknesses observed for Curacao to become a major transshipment centre: <ul style="list-style-type: none"> <li>- Location opposite trunk routes</li> <li>- High captive volumes</li> <li>- Port accessibility</li> <li>- Handling capacity</li> <li>- Cost</li> <li>- Participation strategic partner required</li> <li>- Currently exclusively rights CPS for all cargo/entire island</li> </ul> </li> </ul>
Logistics	<ul style="list-style-type: none"> <li>• Rule of law</li> <li>• Security of island</li> <li>• Location</li> </ul>	<ul style="list-style-type: none"> <li>• The Curacao Airport Holdings seems understaffed and overstretched</li> <li>• Recent downgrading of airport</li> <li>• Labour costs and taxation</li> </ul>
Back office services, software development and IT services	<ul style="list-style-type: none"> <li>• Curacao enjoys “exceptional” connectivity (5 major sub-sea cables, 2 more projected, that the island is connected to).</li> <li>• Some companies already established and successful in this sector</li> </ul>	<ul style="list-style-type: none"> <li>• Proposed labour laws</li> <li>• Taxation</li> <li>• Costs of doing business</li> <li>• Taxation</li> </ul>

Sectors	Pull factors	Push Factors
Clean energy	<ul style="list-style-type: none"> <li>• Wind conditions are ideal for the exploitation of wind energy</li> <li>• The subsidies related to the production of solar panels by the US and China have helped to sharply reduce the price of the technology, and make it more affordable</li> <li>• Ability of producers to use feed-in tariffs to sell excess power to the grid in Curacao</li> </ul>	<ul style="list-style-type: none"> <li>• The lack of a coherent energy policy and the existence of electricity supply contracts that guarantee the power providers a minimum rate of return on their investments (fuel surcharge) gives no incentives to developers to encourage green energy.</li> <li>• The cost of capital remains a major discouraging factor in transforming of the energy sector.</li> </ul>

## **F. Summary of Curacao's overall comparative and competitive advantage and in all sectors identified as potentially critical for future economic growth and development**

Based on the analysis above, this section summarizes the favourable and negative factors for Curacao's overall comparative and competitive advantage in all sectors identified as potentially critical for its future economic growth and development.

### **1. Summary of Negative factors**

The issues that are unfavourable to the definition of a new economic policy in Curacao stem from exogenous factors, which the Government have no or little control over, as well as endogenous factors. The first ones theoretically require international cooperation to try to curb them. When it comes to rectifying the second ones it is exactly what a renewed policy is meant to do. The analysis was carried out against a policy possibly focusing on sustainable development, diversification and business competitiveness.

#### ***a. Unfavourable exogenous factors***

- Small physical size, proneness to climate extremes.
- The threats posed by a changing climate to Curacao's development prospects.
- Limited natural resources, inclusive of freshwater.

- Limited resident human capital (a population of approximately 140,000 inhabitants).
- High fossil fuel costs estimated at 0.42 US\$/kwh.
- High cost of raw material in general.
- High cost of new environmental technologies.
- The high cost of international ocean and air freight, although most study respondents did not consider that factor as an obstacle.
- Strong foreign competition and size of emerging economies.
- The erosion of trade preferences.
- Food prices are likely to continue to fluctuate with a general trend to move upwards

***b. Unfavourable endogenous factors***

Endogenous factors are twofold. On the one hand, they relate to objective data related to the current situation of the country and its companies. On the other hand, they are related to a number of existing states of mind prevailing in the country and which can, through politics, hinder changes.

- ***Objective endogenous factors include the following:***

***Environment:***

- There are insufficient mechanisms to ensure that polluters pay the full cost for their polluting actions. This may impair the proper pursuit of sustainable development.
- There is a poor record of measurement how quickly natural assets are being lost.
- There is an inadequate legislative framework to protect the marine resources.
- Limited research has been conducted to ascertain the effects warming temperatures northward may be having on migratory patterns of the fish stock.

***Human resources***

- There are declining job opportunities on the island.
- There are relatively high levels of unemployment, estimated in the vicinity of 30% of Curacao's youth, which impair social sustainability
- Curacao suffers from significant brain drain of its qualified personnel, which may actually exceed the Caribbean average
- There remains functional illiteracy in the population

- Crime is on the rise and poses a serious threat to social stability.
- Despite job opportunities decline and the existing level of unemployment is high, there is a shortage of skilled labour. In particular, there is insufficient technological expertise.
- The education system is not responsive to the needs of the Island in general and of employers in particular.
- Curacao spends a relatively high percentage of its GDP on the education system compared to other countries in the region. However, there continues to be clear areas for improvements. The drop-out rate from secondary school remains high. This means that the prospects for these persons to be absorbed within the formal job market and to earn an acceptable level of income remain challenging.
- Wages are on average quite high relative to productivity levels.
- Labour regulations are burdensome and lack flexibility

### ***Business Environment***

- The cost of doing business in Curacao is generally high, inclusive of the cost of capital (often due in part to the transaction costs associated with monitoring small firms).
- High shipping (and container handling) fares.
- High electricity and telecommunication prices.
- The cost of water is exorbitantly high, due in part to a leakage of about 25%, an obsolete distribution system, and elevated energy costs.
- There remain unnecessary administrative hurdles and discretionary practices regarding the establishment of companies, the production and the distribution of goods and services, and their importation. Stakeholders complain about bureaucracy and red tape and not always predictable customs procedures.
- Applying for a work permit in order to hire an overseas person is very difficult and extremely challenging. The 80 – 20 rule is an important constraint in sectors such as tourism.
- The local judiciary remains too slow to effectively settle commercial disputes. Furthermore, concerns were also expressed about the possible lack of independence of the lower courts.
- Problems were identified in the implementation of the existing rules and procedures.

### ***Economic policy, trade and investment***

- There is a significant budget deficit, which must be curbed. The Government remains constrained in its budgetary policy, pursuant to its Agreement with the Netherlands that in exchange of full relief of the former Netherlands Antilles' debts, it would produce sound budgets and avoid undue deficits.

- Pressures related to health care and pensions present a significant drag on the budget which may not be sustainable in the long term.
- Due to the fact that since 1971 Curacao has operated a fixed exchange rate with the US\$ of NAf 1.79 = US\$1, it is limited in its monetary policy instruments.
- There is a growing level of uncertainty about the economic development prospects of the economy. This impairs domestic and foreign investment.
- There is a growing dependence on foreign funds, which is unreliable by nature and especially so amid a climate of heightened risk aversion and uncertain global economic conditions
- Low level of investment may speak to relatively weak degree of FDI attractiveness. The presence of poor investment returns is confirmed when compared to regional or income classification averages.
- The bulk of private investment goes into three sectors only: financial, utilities ('Electricity, gas, and water'), and 'Transport, storage, and communications'.
- A combination of inadequate savings and deficiencies in financial intermediation has played a part in reducing investment.
- Domestic savings are inadequate. Although this remains masked for the moment given the Dutch liquidity infusion, the accelerating decline in commercial bank liquidity and rising accumulation of foreign savings seems to reflect this underlying problem. There is absence of a clear policy to remedy this ailment.
- The Government still lacks the capacity to define a trade policy in keeping with international rules and practices and to negotiate trade agreements as the need arises. No systematic trade-related technical assistance is organised. There is no regional programme in the framework of the 10th EDF (European Development Fund) in the area of trade.

### ***Industrial policy***

- There is a considerable difference between the patterns of domestic production and consumption.
- Curacao's export base is undiversified. The portfolio of curacao is very concentrated both on markets and in products. The US, The Netherlands and other Netherlands Antilles islands account for over three quarters of its exports.
- Curacao does not have a competition law.
- Stakeholders interviewed indicated that unregulated anti competitive practices seem to take place in the sectors of telecommunications, utilities, pharmaceuticals and harbour services.
- The one sector that continues be the leading growth contributor, i.e. "financial intermediation", has posted a notable decline in economic activity.

- With the loss of Curacao's national carrier ALM, Curacao lost many of its Jamaican and Haitian customers.
- Taxes are high. There is a risk that an overtaxed populations circumvents making payments by entering the informal/shadow economy.
- There is a weak company structure in Curacao. A majority of companies employ not more than 10 people. They have not sufficiently invested to enhance their competitive edge in most cases.
- Few companies run a marketing department and professionally explore niches. Companies are not currently well-prepared to export and face competition.
- There is, generally speaking, an observable lack of brand awareness.

### **Politics**

- It is difficult for any single party to get a parliamentary majority of eleven seats. A coalition government is often required and coalition governments are often unstable.
- The regular changing of Governments in the country generates lack of continuity in development plans. There is a risk that Governments become focused on short term and sector/program- specific result, leaving limited room for an integrated comprehensive approach toward economic development.
- There is insufficient dialogue and consensus between key stakeholders, namely the Government, the private sector and the labour unions.

### **Attitude**

Apart from those factors difficulties of a more political nature due to mentalities and culture in Curacao should be expected:

- A feeling of fear prevails among the population afraid of facing a difficult transition phase. Despite the counter-productive effects of Curacao's system on social disparities, trade unions and other civil society representatives have been exerting strong pressure to maintain a number of protection schemes and preserve local jobs.
- Curacao's young people would like to emigrate.
- Capital holders resent the current situation and do not invest. Existing liquidities are likely to flee the country.
- The country remains very divided, thus generating unstable politics.
- There are many visions, but a structural lack of capacity to get organized and move into practical implementation



**c. Sector-specific Unfavourable factors**

In addition to the negative factors highlighted above, the Expert Team identified the following sector-specific constraints / negative factors for development:

***Agriculture***

- Curacao's agricultural sector, comprised of some arable agriculture, livestock and fisheries, remains nascent and labour intensive.
- Relatively abundant and cheap supplies of imported foods brought into the island "crowd out" local production.
- Low net benefits derived from being engaged in agriculture
- Curacao is a freshwater scarce island. Shifting rainy seasons around which farmers plan their planting routine and longer dry periods said to be associated with climate change continue to negatively impact the sector.
- Rising grain prices caused feedstock to increase and thus the input price for livestock.
- Overfishing is observed.

***Tourism***

- Shortage of trained personnel to meet growth demand.
- Mismatch between pre-service training and industry needs.
- Growing dependency on overseas workers may affect product character.
- Rapid expansion of tourism may alienate locals due to traffic congestion, restrictions on access to amenities, etc.
- Over-supply of accommodation.
- Uncontrolled/illegal development.

***Cultural Industries***

- No art school in Curacao.
- Insufficient support to emerging artists to promote their talent, market it overseas, protect its copyrights and assist in the management of events/exhibitions/concerts for such emerging artists. All promotion has to be done by private sector with no public sector support
- Poor distribution channels; there is a private local craft market but no public craft market place. It is difficult to compete with products from China.
- At present, many events are primarily geared to the local population, with few visitors coming from outside the country..

- Insufficient synergies with tourism industry.

***Financial Industries***

- Limited competitiveness of the industry
- Threat of actions by the OECD countries.
- Poor implementation of legislation does not facilitate the development of new products.

***Oil Refinery and Oil by-Products***

- The distinctive smell of sulphur emissions which are unpleasant to tourists.
- The emission of large amounts of greenhouse gases such as sulfur dioxide (SO<sub>2</sub>), nitrous oxide (NO) and carbon dioxide (CO<sub>2</sub>), which are all extremely damaging to the environment and public health.

***Maritime, Airport, Transshipment and Vessel Registration Cluster***

- Obsolete equipments
- Growing competition from harbors like Colon and Jamaica, which have upgraded their harbor infrastructure and activities to accommodate post-Panama container ships. Other harbors in the region such as St. Maarten, Cartagena, Trinidad and Manzanillo have also been investing in post-Panama infrastructure.
- Obstacles in the registration and certification of ships, as well as in the inspection policy that were seen by stakeholders as the most obstructive and bureaucratic
- In the case of transshipment in Curaçao, policies are required to address the following inherent weaknesses observed for Curacao to become a major transshipment centre:
  - Location opposite trunk routes
  - High captive volumes
  - Port accessibility
  - High handling capacity
  - Low cost (transshipment is highly price sensitive, footloose, cost two additional moves)
  - Participation strategic partner required, willing to invest (BOT)
  - Currently exclusively rights CPS for all cargo/entire island

***Logistical services related to high value products***

- The Curacao Airport Holdings seems understaffed and overstretched.

***Clean Energy Sectors***

- The lack of a coherent energy policy and the existence of electricity supply contracts that guarantee the power providers a minimum rate of return on their investments (fuel surcharge) gives no incentives to developers to encourage green energy.

- The cost of capital remains a major discouraging factor in transforming of the energy sector. Encouragingly though, is the ability of producers to use feed-in tariffs to sell excess power to the grid in Curacao.

## **2. Issues favourable to the implementation of reforms**

Notwithstanding the aforementioned issues Curacao has a tremendous number of assets compared with its Caribbean ACP neighbours. The challenge will be about leveraging on those issues in order to carry out the desired policies.

### ***a. General positive factors***

- Curacao sits in an enviable position in the region currently in the fringes of the hurricane belt in the Caribbean.
- Curacao is close to regions comprising relatively prosperous and high growth countries and may develop positive synergies with them.
- Curacao has substantial marine resources.
- Curacao has a low rate of inflation and a stable currency (pegged to the US dollar)
- Each graduate from secondary school is proficient in at least three official languages, i.e., English, Dutch and Spanish.
- There is a strong work and analysis potential among the urban Curacao workforce although there is a lack of personnel in many areas. Nevertheless, investing in vocational training remains vital to fill the gaps between communities.
- Salaries and social welfare are already quite good even though a drop in purchasing power has been recorded. High salaries certainly add to company costs but they help to attract and retain qualified employees, hence help to invest in production quality and corporate organisation quality. Moreover, no future adjustments will be needed to investments as overly low salary costs will not be sustainable.
- In terms of basic infrastructure, Curacao is reasonably well equipped (telecom, harbour, airport, road infrastructure). There is a reliable supply of utilities, even if they are expensive.
- Data collection mechanisms are in place and statistics are generally available.
- The maintenance of the Dutch legal and judiciary system is a positive *acquis* for Curacao.
- Curacao benefits from the most generous tariff regime granted by the European Union

- In addition Curacao is subject to a preferential regime of rules of origin and special provisions on transshipment
- The close connexion with the EU provides a favourable framework for exploring opportunities for trade and investment with the EU Member States.
- Private cash assets are possibly available for investments.
- Despite the counter-productive effects of subsidy programmes and direct corporate aid those initiatives can prove effective as long as they are accompanied by meaningful investments promoting competitiveness and as long as they do not distort competition or international trade. There are already systems supporting IT centres, tax incentives on inward capital investment, investment allowances in the form of deductions from taxable profit, Expatriate exemptions on income tax, E-Zone company exemptions or reductions in profit and turnover tax rates, duty exemptions, and payment of foreign exchange licence charges, tax holidays and duty exemptions for new industries and hotels and land development companies.
- Lastly, people are starting to think differently. The stakeholders within the private sector and the Government are starting to ask the right questions. Companies have made it clear that they are ready to take up the challenge if a clear policy is implemented.

All in all despite unavoidable hurdles preceding any economic transition phase Curacao seems to have many assets to adjust to the requirements associated with globalisation and international competition all the while being able to capitalise on new business opportunities resulting from increased market openness on an international level. The transition may well be painful for selected economic players. Yet it does not have to be immediate and fast. In addition donors' funds are available to mitigate the most harmful effect for the populations. Therefore apart from its small size and its low population density one has to admit that Curacao has few excuses to oppose any policy promoting competitiveness and openness to international trade.

#### ***b. Sector-specific Favourable factors***

##### ***Agriculture***

- The island is said to produce a very high quality of products, though the scale of production, water requirements for irrigation, high wage costs, and other factors would limit its ability to develop agriculture on a large scale. .

##### ***Tourism***

- Friendly welcoming people and staff in tourism industry
- Multilingual; diverse culture
- Building long-term skill base in the industry

- Existence of Initiatives in training, community-based tourism and public awareness
- Good year round climate
- Interesting reefs – drop-offs, swim-throughs, etc.
- Variety of beaches; national parks and scenic areas
- Willemstad world heritage city a major attraction
- Extensive road network which is in good condition
- ‘State of the art’ airport management system
- Modern cruise terminal and mega pier
- Safe havens and moorings for yachts
- Good provision of water and power
- Plentiful accommodation
- Range of activities and attractions
- Rich cultural heritage

### ***Cultural Industries***

- Curacao’s has a rich cultural heritage.
- Curacao enjoys UNESCO recognition as a World Heritage Site, making it only one of 17 sites recognized by UNESCO in the Caribbean.
- Carnival is perhaps the most international event held in Curacao, although this faces competition from other carnivals in the Caribbean.
- The cultural infrastructure has developed over the past decades, through its museums, galleries, publications, research, international conferences held locally, Kas di Kultura, Museo Tula and private galleries.

### ***Financial Industries***

- Sophisticated financial system
- Favourable tax treaties

### ***Maritime, Airport, Transshipment and Vessel Registration Cluster***

- As one of the largest commercial dry-dock in the Caribbean, the Curaçao Dry-Dock (CDM) is well known in the region for the high quality of its services and apart from being considered one of the most expensive dry docks in the Caribbean, due to strong reliance on import materials and skilled labor, ship owners still consider this dock as relatively inexpensive, due to the highly favorable rate of the Euro.

- Curaçao Airport has an important strategic location, making the country an excellent distribution hub for several important regions. Its international airport, 40 miles north from Venezuela, offers transshipment/storage of goods and fuel supply and transit services for transatlantic flights to/ from the entire Caribbean region as well as South, Central, North America and European Union markets.

***Back office services, Data Centre and Digital, IT and high tech services***

- Curacao enjoys “exceptional” connectivity (5 major sub-sea cables, 2 more projected, that the island is connected to).

***Clean Energy Sectors***

- Wind conditions are ideal for the exploitation of wind energy
- The subsidies related to the production of solar panels by the US and China have helped to sharply reduce the price of the technology, and make it more affordable.

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**CHAPTER IV.****SCENARIOS FOR DEVELOPMENT AND RECOMMENDATIONS**

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**A. Overall strategy for sectoral / industrial development****1. Sectoral development, and synergy / clusters of goods and services**

The analysis undertaken in Chapter III was based on both data mining and economic analysis, as well as the qualitative information gathered during the sectoral workshops held in Curacao over the course of 2011. The approach taken in collecting and analysing data was underpinned by the findings of recent leading recent theoretical foundations to development. The analysis was also careful in incorporating the characteristics specific to Curacao into the analysis, including the fact that it is a small island state with a developed infrastructure, has strenuous political divisions, social inequalities and stagnant economic growth for over a decade. It's geographical location and the context of the competition which has emerged from its own region with respect to tourism, insurance, finance and banking services, and transportation have also been carefully considered. The limited scope that is at the Government's disposal for fiscal expansion is well understood and public budget neutral policies have therefore been kept in mind where possible, with the private sector acting as a major engine for investment in gross fixed capital formation.

Since Curacao's long-term development strategy will have to rely on the private sector to inject investment in new, emerging and well-established industries, public sector interventions must be focused on addressing market failures and encouraging a business and investment-enabling environment. As highlighted in the analysis in Chapter III, the greatest returns on investment in the public sector will be related to education, but also to reducing red-tape and creating transparency and predictability in the legal, regulatory and policy environment. Since being conferred its autonomous status, Curacao's economic policy has suffered a crisis in confidence and the uncertainty surrounding monetary policy and the independence of the central bank has exacerbated the perceptions of country risks related to investing in Curacao by the private sector. Finally, the global economic crisis has also brought additional difficulties to the island, as growth in world trade flows has subsided, capital flows are favouring "safe" assets, and the competition of international financial centres has become increasingly fierce, to the detriment of the smaller jurisdictions.

The cluster analysis of the portfolio of industries and services currently in existence in Curacao has revealed that there are strong potentials for growth, in spite of the aforementioned policy and international environment. Though all sectors suffer from some common policy concerns, in particular those linked to qualified labour and uncertainty with respect to economic policies, Curacao also

enjoys strong reputational advantages, a developed infrastructure, a legal structure inherited from the Dutch system and a stable secure environment compared to many other states in the region. Curacao has however lost competitiveness in key areas where it enjoyed strong advantages in the past. The cluster approach will build on existing industries to reclaim some of the lost market share.

There are a number of sectors where Curacao remains competitively strong, where there are significant linkages with other sectors of the economy and where a cluster approach to sector promotion could be adopted. This is particularly the case for tourism and travel sectors, green technologies, banking and finance, transport and logistics, and e-commerce. The importance of cultural and creative industries remains under-researched and under-reported but its potential impact across a range of sectors is likely to be extensive. The government has a major role to play in fostering the right environment for these sectors to grow, including bolstering the education and training programmes that can produce professionals and skilled workers which are necessary for these sectors to gain in productivity, entrepreneurship and quality.

Curacao should build on existing institutions and existing sectors in order to improve efficiency and productivity gains. Productivity issues are dealt with in greater detail in section IV.B.1, by using econometric modelling. The greatest weaknesses seem to arise from quality and productivity issues, even in the services sector. For example, the banking sector has been identified as lacking innovation and the regulatory environment has not kept pace with innovations in financial instruments thereby limiting the scope that Curacao based financial institutions have to create new products.

The cluster approach is one that can avoid picking new winners and ensuring that the products and services developed are based on product spaces, which already exist. This is not to say that entirely new products and services cannot emerge in Curacao, but a significant amount of evidence from the business literature suggests that the probability of success is significantly lower, when starting from nothing<sup>169</sup>. The concept of product space proximity is embedded in the idea that it is easier to move into the production of like products (those which use similar inputs) than starting production in an entirely new sector. The proximity ( $\phi$ ) between products  $i$  and  $j$  is the minimum of the pairwise conditional probabilities of a country exporting a good given that it exports another. This is defined by the formula:

$$\phi_{i,j} = \min\{P(RCA_i | RCA_j), P(RCA_j | RCA_i)\}$$

where RCA is the comparative advantage of the country in exporting a good:

$$RCA_{c,i} = \frac{x(c,i)}{\sum_i x(c,i)} \bigg/ \frac{\sum_i v(c,i)}{\sum_{c,i} x(c,i)}$$

<sup>169</sup> Porter (2009); Rodrik (2007)



An RCA greater than 1 would indicate that the country exports a relatively greater quantity of a product than the world does. Based on evidence from trade analysis, country's perform best in those sectors where the relative densities of production are around those products which a country enjoys a comparative advantage in<sup>170</sup>.

## 2. Incremental approach

The sequencing and phasing in the implementation of policies which promote industries, services or investment more generally, must be carefully considered in the recommended actions to take. Addressing systemic weaknesses in Curacao will be one of the foundation steps towards creating a more competitive, innovative and resilient economy. Without tackling this first set of constraints, industries will remain constrained by their environment and investment will not be forthcoming. The principal issues to tackle are at the macro level and including the red tape of public administration, the inadequate education system, the uncertainty linked to the policy environment and insufficient adaptability of the public sector's regulatory and legislative apparatus to respond to a changing international context. Concerns on the external liquidity of Curacao also have a bearing on the private sector's decisions for investment and their room for expansion. The balance of payment situation needs to be resolved and the upcoming expiry of the grandfathering clause in 2020, needs to be addressed today to reduce uncertainty over the coming years.

A second step will involve implementing the accompanying measures to promote specific sectors. These can include the definition of an industrial policy, introduction (or removal) of trade instruments to support given sectors, and/or negotiating bilateral agreements. The simplification of administrative procedures, and a regulatory environment which supports rather than simply controls the service sector is also needed. Naturally, supervisory powers are necessary to ensure that business practices are kept to the highest standards, but the role and mind-set of the public administration needs to change from a purely control or audit-based nature.

A third step is providing direct enterprise support. Outward oriented countries around the world have established export promotion agencies that provide market intelligence and support in accessing third markets. The Innovation Centre of Curacao exists and could be either build on to include an export markets division, rather than creating a new institutional structure. Training to enterprises in ISO and other business processes would be important. Sectoral strategies can also be defined through PPP channels, although Curacaos' history of implementing strategies has been very mixed. The importance of having measurable goals and milestones in the strategies, as well as a clear indication of budgets and the phasing of activities will need to be integrated into any strategies which are developed.

A fourth step is to improve the dialogue between government and the private sector and in particular ensure that the private sector improves its advocacy role in the formulation of policies. To do this

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<sup>170</sup> Hidalgo, C. A. *et al* (2007)

requires building knowledge in the private sector of policy issues and building trust between both parties.

A final step is to improve monitoring of the business environment, addressing constraints and impediments which arise and ensure that government provides the adequate support to ensure that any barriers to doing business in Curacao are addressed swiftly.

### **3. Plugging into global and regional supply chains**

Curacao's unique geographical location has been highlighted on various occasions throughout the report. Curacao's shipbuilding and repair services, as well as its role as a transportation hub, placed it as a major trading centre in the Caribbean. Over the last decade, Curacao has lost competitiveness in the region and has become a small/medium size port and logistical hub in the region. Curacao never has managed to move into manufacturing and has relied on services. Curacao's educated workforce and relatively advanced institutional framework in comparison to other Caribbean islands make services an obvious sector for the economy to grow. Services, such as back office operations, which tap into multinational operations was explored in the previous chapter. The right regulatory environment and an educated workforce are prerequisites to be successful for achieving competitiveness in this sector.

As a result of its population being small and the scale of production likely to be quite insignificant by world standards, Curacao has never achieved any notable manufacturing operations, not even light manufacturing. Yet the trade preferences which Curacao enjoyed in the past, and continues to enjoy, would enable it to become competitive in some niche markets, where more competitive players face trade barriers. There are successful examples of where small Caribbean islands have been successful in developing a niche industry by taking advantage of generalised systems of preferences, such as Caribbean Basin Initiative of the United States. In order to successfully penetrate supply chains, Curacao would need to ensure that its policy and regulatory environment fosters easy access to resources and enables easy export of goods or services. A case in point is difficulties expressed by some sectors to import inputs into their industry. Reviewing the trade impediments is necessary to ensure that the free flow of goods and services is possible. This would be greatly enhanced if Curacao was to embrace international agreements which commit countries to implement trade facilitation measures. In this respect, Curacao's desire to join the WTO would strengthen and ensure greater certainty in its policy environment.

#### 4. Limited public expenditure

Given the tight fiscal situation in Curacao, public expenditure is limited. This is reflected in the table below which reveals that Government expenditure has not changed significantly over the last three years. The Government is struggling to manage the fiscal accounts in line with what is mandated hence expenditure is likely to be restricted until there is economic growth or revenues can be increased from other sources.

Description	Provisional figures 2011 (NAf millions)	Budget 2012 incl. Suppl. (NAf millions)	Budget 2013 incl. Suppl. (NAf millions)
<b>Current Account</b>			
Expenses	1,591.4	1,675.6	1,682.2
Income	1,564.6	1,735.8	1,718.8
<b>Balance</b>	<b>-26.8</b>	<b>60.1</b>	<b>36.6</b>
<b>Capital Account</b>			
Expenses	68.7	160.3	152.7
Income	58.8	100.2	116.2
<b>Balance</b>	<b>-9.9</b>	<b>-60.1</b>	<b>-36.6</b>
<b>Setbacks:</b>			
Health insurance Funds (ZV)	75.0	45.1	79.5
FZOG	6.0	2.6	6.4
PP	13.7	6.4	15.9
Old Age Pension (AOV)			40.0
Less income Dividend	25.0	25.6	25.9
Personnel (as per May)		3.4	3.5
<b>Total deficit</b>	<b>119.7</b>	<b>83.1</b>	<b>171.2</b>
<b>Estimated equity</b>		<b>55.9</b>	<b>9.6</b>
<b>Financed with government's equity</b>	<b>156.4</b>	<b>139.0</b>	<b>180.8</b>

Source: Figures derived from statistics from the Ministry of Finance

Note: the estimated (financial) equity is not yet received (liquid).

To understand the limitations on Government expenditure even more, the following are budget conditions that the Government is supposed to meet in accordance with Article 15 of the Kingdom Act on the rules for the financial supervision of the countries of Curaçao and Sint Maarten:

- Interest burden conditions
  - Interest burden may not exceed 5% of the average revenues of the three previous years
- Financial conditions

- Balanced current account
- Deficit on capital account is permitted if complied with interest burden norm and balanced current account

Curacao has not been able to meet the above mentioned financial standards and as a result the Minister of Internal Affairs and Kingdom Relations announced an instruction to the local Government that it must address the deficits (98 million guilders) from previous years (2010 and 2011) on the current account and provide an additional cover of 55 million guilders to balance the budget for 2012 by introducing both lower spending measures and income enhancing measures. According to the instruction, the deficit should be addressed in 2012 and if necessary in subsequent years.

It is expected that these tight budgetary requirements will have a significant negative effect on the economic growth of Curaçao unless structural policy measures can be implemented to stimulate economic growth. Some of the required structural policy reforms will have to take place in the following:

- Health costs
- Restructuring Cure/basic health insurance
- Restructuring Old Age Pensions
- Dividend policy
- Personnel management
- Integrated Medical Specialist Agency.

The above analysis demonstrates that the Government is constrained in terms of its expenditure options. The following table provides some details on budgeted expenditure in some key sectors for the 2011 to 2013 period.

Figure 67 budgeted expenditure in key sectors (2011 - 2013)

	Current Expenditure NAf/million				Capital expenditure NAf/million		
	2013	2012	2011		2013	2012	2011
<b>Infrastructure (public work)</b> <sup>171</sup>	14.9	51	49		40	2.7	1.5
<b>Subsidy Tourism Board</b>	30.7	25	30.2				
<b>SME</b>	3	3.3	3.3				
<b>Education</b> (incl. education, science, culture & sport)	329	348	348		11.2	1.8	3.9
<b>Total expenditure</b>	<b>1600</b>	<b>1700</b>	<b>1600</b>		<b>270</b>	<b>64</b>	<b>46</b>
<b>Health</b> (incl. Healthcare, <sup>172</sup> environment and Nature)	304	59	73		170	0.9	6.8

Source: Figures derived from statistics from the Ministry of Finance for Budget 2011-2013

It can be seen from the figures in the above Table that for 2013, current expenditure on Infrastructure is budgeted to decrease from NAf 51 million in 2012 to NAf 14.9 million in 2013 but capital expenditure on infrastructure is expected to increase from NAf 2.7 million in 2012 to NAf 40 million in 2013 to compensate. A significant proportion of expenditure on Infrastructure is for roads, streets and squares. It is important that the infrastructure of the country is maintained in good condition to support tourism development and the efficient movement of persons and traffic. However, given expenditure limitations, this will present a challenge to the Government but the situation will only deteriorate in the medium to long term if the country's infrastructure is not upgraded (or at least maintained).

In terms of subsidy to the Tourism Board, in 2013 this is budgeted to return to the 2011 level after falling to NAf 25 million in 2012. Given that tourism is a priority sector and the Tourism Board is a critical support organization in the industry, it is important that the subsidy to the Tourism board is maintained unless it can develop revenue generating mechanisms of its own. However, it is recommended that Tourism Board expenditure be scientifically analyzed and carefully monitored to ensure that scarce resources are allocated to the areas with the highest returns.

In terms of public expenditure on Small and Micro Enterprise Development (SME), it can be seen that this is relatively low at NAf 3.3 million in 2011 and 2012, and is budgeted to be reduced to NAf 3 million in 2013. Given that SME Development is expected to be an important engine of economic growth, it seems that public expenditure in this area should be increased rather than decreased. A careful assessment of the critical requirements for stimulating the SME sector should be conducted and resources allocated accordingly.

Current public expenditure on education is budgeted to decrease in 2013. While there is a higher allocation to capital expenditure, this is not sufficient to offset the projected decrease in current

<sup>171</sup> From which 2.8 million, 35.5 million and 34.7 million for roads, streets and squares in 2013, 2012 and 2011, respectively

<sup>172</sup> Total healthcare cost includes environmental management and nature. The higher expenditure on the current account for Healthcare in 2013 is allocated for social security, environmental management and nature (and not health per se). The increased current expenditures will be compensated for by decreases in current expenditure on 1) traffic, transport and urban planning, 2) social development, 3) administrative planning & services which decreased by 54%, 56% and 25% respectively in 2013 compared to 2011.

expenditure. This is clearly a concern given that there are already issues raised about the quality of education, especially at the primary and secondary levels, as well as the level of dropouts. Public expenditure on education has accounted for about 20% of current public expenditure, which reflects its relative importance to Curacao. It is therefore imperative that these resources are well focused and purposefully directed at developing a strong human capital base that also meets the requirements of the labour market. There are complaints from employers in several industries, including tourism, that the education system is not producing the level and range of skills required and in some cases labour has to be recruited from overseas while at the same time there is significant unemployment amongst nationals of Curacao.

Public expenditure in the health sector accounts for about 4% of current public expenditure. During consultations, several concerns were raised about the state of the health infrastructure and the plans to construct a new hospital were also discussed. The high capital expenditure of NAf 170 million shown in the Table above is earmarked for construction of the new hospital.

As mentioned earlier and clear from the foregoing analysis, overall there are serious limitations on the level of public expenditure in Curacao, it is therefore imperative that careful thought and planning are put into the efficient allocation of the scarce resources available for public expenditure

## **5. Policies fostering entrepreneurship, investment and innovation**

### ***a. Predictable business environment***

In order for the investments to take place, whether in new sectors or to enhance capacities in existing sectors, it is important for potential investors to have reasonable expectations of sufficient returns on their investment in a reasonable period of time.

Investors typically resent any obstacle that would delay the implementation of their project and any additional cost that would result from the need to comply with burdensome regulations or regulations hampering their capacity to source input and staff.

The higher the burden is, the higher and the faster the return on investment will be expected. For instance, an investor could be more tolerant of administrative or regulatory barriers when the investment deals with the exploitation of natural resources or use of a cheap and uneducated workforce (such as in assembly lines). Indeed, in these sectors, risks are lower and immediate returns tend to be higher. Such investment, however, causes vulnerability from both an environmental point of view (exhaustion of the resources) and the social point of view (easy to delocalize when wages increase in relation to other countries).

When the investment is to take place in an innovative sector and entails some uncertainty (risk), the challenge for the investor is to mitigate its risk, while believing there is a positive business environment

in the country. Governments are therefore called to develop the right incentives, offer the right infrastructure and availability of essential services, limit taxes and red tape to what is necessary and to mitigate losses in case the investment is not fruitful.

Of course, no one would challenge the right of a country to impose rules and regulations, including taxes when they fulfil a legitimate objective and they are necessary to achieve it. No one would ever disagree for instance that the environment, or the life and health of persons, animals or plant should be preserved or that the weakest in society should be protected.

The challenge however is to ensure that none of these taxes, rules and regulations is more burdensome than necessary to achieve the legitimate public policy objective concerned. In this respect, owing to the rather simple nature of Curacao's economy, regulations should be much simpler than those applicable in more sophisticated economies. All requirements and restrictions that are not related to domestic non-economic policies (such as labour environment, etc) should be lifted.

Furthermore, whatever rules and regulations are imposed, assuming investors can deal with them, they must be predictable and not change too often in a way that would unduly affect the operations or the cost structure of the investment. Political stability or at least national consensus on key regulatory features of the country is essential in this respect.

Finally, there is a need to create the type of general public and administrative attitude and environment which welcomes investors, seeks to provide useful services to them and helps and facilitates business contacts among them.

Different regulatory issues must be addressed when developing a good business enabling environment:

- Ease of establishing a company (few fees and formalities).
- Availability of different types of companies, depending on the business chosen, to which distinct, clear and simple regulatory regimes apply,
- Transparency of rules and regulations affecting the expected business.
- Transparency and predictability offered in the way rules and regulations are implemented.
- Low taxes and delayed collection of taxes for new investments until at least the first fiscal year.
- Possibility to obtain quick redress through an impartial and efficient adjudicatory system (Courts).
- Guaranteed and cheap availability of key services and utilities (financial services, telecommunications services, business services, electricity, water, etc)
- Control of unfair practices of competitors. This requires an enforcement of a competition policy.

- Clear and predictable norms and standards and certification processes. These must be in line with international standards and adapted to the biggest export markets (EU and US). Curacao needs to have a national standards body or adhere to a regional body.

Political and societal values must also be developed:

- Political stability must be guaranteed, or at least consensus on key regulatory features of the country.
- It is important to develop a culture of transparency and cooperation in business, so that it generates profitable synergies and clusters of services (1+1=3).
- Investment and entrepreneurship needs to be positively perceived and encouraged in the country, through families, communities and educational system.

#### **b. Fiscal Policy**

Curacao has several fiscal initiatives in place aimed at fostering entrepreneurship, investment, and innovation. On the expenditure side the Government spends around 3% of the annual budget (estimated to be about NAf 54.9 million for 2013) on infrastructure to support industries by maintaining roads and providing other public goods. In terms of the Tourism Industry, which is a priority sector, the Government provides to the Tourism Board an annual subsidy equal to around 2% of the annual Budget (estimated at NAf 30 Million for 2013). The Government also spends significant amounts on education and health to support corporate and individual citizens of Curacao. In addition, the Government spends about NAf 3 million per annum on SME development aimed at stimulating small and micro businesses.

Apart from the spending (mentioned above) to foster entrepreneurship, investment and innovation, the Government provides a variety of fiscal incentives.<sup>173</sup> The purpose and nature of incentives are summarized as follows on the Invest Curacao website:

*In order to attract investment in certain sectors, the Netherlands Antilles provides clearly stated incentive schemes for four sectors - hotel, manufacturing, land development and e-commerce. In addition, tax incentives are also available for "selected" business entities. Since the fifth category is not sector-specific, in reality, fiscal incentives are available to businesses operating in any sector. This provides ample room for the government to operate at its discretion.*

The above statement suggests that there are fiscal incentives for most businesses operating in Curacao. These incentives are laid out as follows:

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<sup>173</sup> Source: Invest Curacao website - <http://www.investcuracao.com/03d05.html>



Figure 68 Fiscal Incentives for Sectoral Promotion

	<b>Hotel</b>	<b>Manufacturing</b>	<b>Land Development</b>	<b>e-Commerce</b>	<b>Others</b>
<b>Criteria</b>	Limited liability company	Limited liability company in non-oil sector	Limited liability company	First need to be admitted to the economic zone area	
<b>Minimum investment requirement</b>	US\$550,000 (if renovation, US\$165,000)	US\$137,500	US\$1,100,000 excluding the value of the land		US\$137,500
<b>Other requirement</b>		Create at least 5 permanent jobs	Investment needs to be made within 5 years of the date of the Central Decision		Create at least 5 permanent jobs to persons born in the NA
<b>Corporate tax</b>		2% for max. of 11 years		2% till December 2025	2% for a period of 11 years
<b>Other tax</b>			2% on the profit obtained by the sale of developed land maximum of 15 years	Exemption of turnover tax and excises	
<b>Exemptions from import duties</b>	On materials and goods required for construction and initial furnishing of the hotel's premises (in case of renovation, exemption is for two years)	On materials and goods required for construction and initial equipment of the industry's premises, as well as packaging material, machinery, raw materials, semi-manufactured articles and accessory means necessary for the industrial process	On materials and goods intended for the laying out of roads, on construction of real estate and on the laying out of construction locations for amusement purposes	Exempted	On materials and on goods required for construction and initial capital equipment (includes expansions) of the business' premises. In addition, exemption from import duties for a period of 10 years at the most on raw materials and semi-manufactured articles, as far as these components are processed by the company.
<b>Exemption of land tax</b>	On the hotel's premise for 10 years after becoming taxable	On the industry's premise for maximum 11 years after becoming taxable, but no later than 2009	As long as the plots of land, which are being developed, are not let/rented out		On the business' premises for 10 years after becoming taxable
<b>Exemption of occupancy tax</b>	On the use of the hotel's land for 1 year after the start-up of the hotel	On the use of the industry's land for maximum of 11 years, but not later than 2009	Due to the use of the company's plots		On the use of the business' land premises, after becoming taxable

	<b>Hotel</b>	<b>Manufacturing</b>	<b>Land Development</b>	<b>e-Commerce</b>	<b>Others</b>
<i>Exemption from personal income tax</i>	On income earned from dividends and other distribution of profits within two years after the fiscal year in which the profit was obtained	On income earned from dividends and other distribution of profits within two years after the fiscal year in which the profit was obtained	On income earned from dividends and other distribution of profits within two years after the fiscal year in which the profit was obtained	Employees who lived outside the NA for more than 5 years can qualify for an expatriate status	On income earned from dividends and other distribution of profits within two years after the fiscal year in which the profit was obtained
<i>Foreign exchange license fees</i>				Upon request, the Central Bank will grant an exemption from the payment of foreign exchange license fee charges for merchandise transactions	

Other Incentives are available to foreign investors including:

- Reduced rent of up to 40% cent for buildings in the free zone (e-zones) managed by CURINDE NV).
- Duty free building materials, machinery and equipment
- An annual investment allowance of 8% on the total investments for the first two financial year's unlimited use of carry-over losses incurred over the first four years of the company's business.

Other incentives include:

- A business Development Scheme available to provide export assistance
- Financing assistance available through OBNA and Korpodeko
- Trade agreements with the EU and USA are established.
- Free trade zones (e-zones) are located at the harbor at Curaçao, the international airport and the Industrial Park. The free zones are secure and permanently maintained. They are a distribution center for export to the Caribbean, Americas and the EU. Products for export to the USA and EU are admitted without charge. There is no customs duty imposed for imports, transshipment and/or export of goods.

The above discussion clearly shows that there are fiscal incentives in place aimed at fostering investment. In order to foster entrepreneurship and innovation more specific incentives and initiatives may be required including:

- More incentives developed and targeted at SMEs
- Increased entrepreneurial training in secondary and tertiary level education

The issues are discussed later in this Chapter.

### **c. Trade Policy**

A review of trade policies was conducted in Chapter III and revealed that tariff rates in Curacao remain moderate. Two thirds of tariffs range between 5% and 15%, yet there are a number of peaks. It was observed that Curacao's tariff policy seems to be motivated primarily from revenue generation objectives. As such, the tariffs appear not to follow any industrial policy objectives and their revision to attain strategic objectives would be necessary in order to create the necessary protection or liberalisation required from imports along the supply chains required in domestic production.

A full analysis and consultations with stakeholders is required to undertake this exercise and ensure that the interests of Curacao are captured optimally. Excessive protectionism will thwart incentives for innovating products, manufacturing processes to reduce costs and improve quality. At the same time, removing tariff altogether, may not allow industry the protection required to foster infant industries and compete. The balancing of protection and liberalisation is the subject of debate and will depend on the capacity of the country to generate niche markets or produce on a scale that enables industry to compete. Continuing protection over protracted periods only serves to create economic rents at the expense of consumers, with the net result of reducing welfare for society as a whole. The analysis must therefore be carefully undertaken, to examine supply potential, demand potential (domestically or further afield through exports) and the kind of business enabling environment necessary to ensure that any domestic business can become competitive. For example, if trade facilitation measures are not in place, and the cost or delays for exporting are excessively crippling, no amount of protection will help. Some representative from the cultural industries complained of the fact that imported materials – paints, canvases etc, take too long to reach and face duties. Similar concerns were raised by the software sector that expressed frustration with the importation of CD-Roms. These relatively minor issues faced at the border do represent business costs, uncertainty for business and can translate in relocation of services overseas. Industrial policy is therefore required to tackle comprehensive reforms which can address all the constraints to industrial growth across the entire supply chain and distribution channels.

Curacao's competitive advantage seems to lie in services. This is an area where it has traditionally enjoyed a series of trade surpluses, particularly in tourism, transportation and banking and financial services. Its revealed comparative advantage is in services. However, as explored in the sectoral analysis in the previous chapter, relative performance of trade in services has been eroded over time. Curacao has been outperformed by other countries since 2000 and lost significant market share for financial and insurance services, transportation and other business services (which include legal and accountancy services – both of which depend on international financial services). The only sector where Curacao has performed particularly well is in computer and IT services. Computer and IT services have enjoyed higher than average services growth over the last decade. For this reason, though this is only an emerging sector, it is a sector which the Government should attempt to support, not through subsidies but by ensuring infrastructure and legislation and regulations keep up with innovations in the sector. For example, Mauritius has made strides towards becoming a free wireless

island and encouraging competition in telecoms operators to ensure they remain competitive in call centres and software development. Education in this discipline is equally important to foster innovation and supply the labour force. Similar policies need to be considered by Curacao. Curacao can also consider signing trade agreements which would cover trade in services. Trade agreements which cover trade in services include mode 3 commitments which relate to the commercial establishment in third countries. These agreements are shown to be quite critical in promoting investment, something which Curacao is in need of. Finally the commitments made in trade agreements provide the security, transparency and predictability which has been lacking in Curacao.

Curacao's market orientation also needs to be better explored. It has opportunities to export to the EU market under the ODA framework but also can study its options for exporting to CARICOM and consider an associate agreement with CARICOM. A study was carried out on this but no action seems to have been taken. The CARICOM market is moving towards greater integration and is becoming an increasingly large middle class market. The products exchanged in CARICOM suffer from a lack of complementarity, although Curacao would be expected to be much stronger in services and could find opportunities in this market. Closer markets in terms of geography are those of Latin America, especially Venezuela and Colombia. These markets do present opportunities though the framework for doing business is more complex.

Curacao has expressed the desire to become a WTO member in its own right<sup>174</sup>. The advantage of joining the WTO would be significant, in particular since it will create the certainty in the policy environment which has been so lacking in recent years. Accession to the WTO would also secure market access commitments from third markets and thereby also increase certainly in exports to third markets. Finally, becoming a member of the WTO will provide access to the dispute settlement mechanism which, despite some criticism, remains the most advanced trade dispute settlement system in existence. The case brought by Antigua and Barbuda against the US is a powerful example of where a small state has gained a ruling against the trade policies of a large country like the US<sup>175</sup>. Though the advantages of being a WTO member are significant, the costs are also high. In particular it limits the scope that Curacao would have in the future to resort to trade measures to protect a local industry, or to raise fiscal revenue. Moreover, the process of accession itself is very lengthy and costly, and judging by recently acceded countries, will result in Curacao having to commit to extensive liberalisation. The financial, insurance, travel and tourism sectors are likely face calls for opening up during the accession negotiations.

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<sup>174</sup> The Government (1995) of the now dismantled Netherlands Antilles has decided to become an independent member of the WTO. In 2002 this decision has been confirmed in 2002. After the dismantling of the Netherlands Antilles in 2010, the Government of Curaçao maintained this decision. The Netherlands Antilles has attempted several times during the last two decades to negotiate new bindings with its trading partners in the context of so called "Article XXVIII" tariff negotiations to ensure acceptance by the WTO's General Council of a new commitment schedule. However, for various reasons these Article XXVIII negotiations were never brought to fruition before the Netherlands Antilles was dismantled as a country within the Kingdom.

<sup>175</sup> This is the case even if the measures for retaliation agreed by the dispute settlement body remain controversial and politically sensitive for the relationship between Antigua and the United States.

**d. Labour policy**

In 2008, a Labour Force Development Policy and Structural Proposal for Curacao was put together via a collaborative effort - over 360 stakeholders participated in the process with some 115 persons representing labour, commerce, civil servants and elected officials, with a vision that included the following:

*“... by 2016, Curacao will have an economy of wealth creators that is prosperous and fulfilling, and that creates value and delivers value. The economy will be supported by a globally competitive workforce that is flexible and responsive, with the right number of workers to meet industry needs; with the right attitudes and the right skills, at the right price.”*

Overall, a total of seven (7) priorities were agreed upon to lay the structural foundation needed to sustain an integrated labour force plan. These included:

1. Integrated labour force planning
2. Flexi-curity Principles as foundation of the plan
3. Curacao as Hub of Lifelong learning for life long employability
4. Vision for the talent pool,
5. Tripartism to achieve the country's goals,
6. Attention to global warming and environmental issues, and
7. Synchronization and alignment of laws.

**Five core policy areas** were also identified in the proposal:

**Policy Area 1: Productivity and Efficiency**

Specific Priorities:

- Implement a performance-based evaluation system across all economic sectors with adequate job descriptions and smart indicators
- Introduce a National Productivity Council as the premier entity in Curacao and the Caribbean known for promoting and facilitating productivity, quality management, and competitive strategies
- Introduce, implement and monitor productivity and efficiency targets and indicators that demonstrate the relationship between productivity growth and economic development

**Policy Area 2: Incentives**

Specific Priorities:

- Implement and sustain incentives for employees, employers and the unemployed that will contribute to durable, long-term employment and a stable, competitive workforce
- Create incentive programs for persons targeted to augment the workforce

- Further develop and sustain decent work conditions and facilities
- Fortify the vulnerable unemployed and employed persons and sustain them in the labour force
- Create and sustain a tax system that encourages changes in the functioning of the labour market in order to gain economic growth and increased well-being

### **Policy Area 3: Temporary and Casual Workers**

Specific Priorities:

- Develop a population policy that visualizes the desired social development by 2016 and further sustained to 2026
- Develop and implement a planned migration policy
- Link the migration policy to the population, labour, education and economic policy.
- Establish an income policy
- Establish temporary and casual workers as important contributors to the labour force and economic development
- Integrate foreign and temporary workers into the status of tax contributors with equal pay and social benefit for equal work.

### **Priority Area 4: Retraining and Retrenchment**

Specific Priorities:

- Employment policy based on flexi-curity principles (Flexi-curity is about bringing people into good jobs and developing their talents, rather than job security, flexi-curity focuses on employment security)
- All retrenchment and retraining programs are designed to establish a change in attitude, motivation & opportunity within the labour force and include mind-set training

### **Policy Area 5: Creative Pay Schemes and Social Programming**

Specific Priorities:

- Shift the mind-set of nationals from an orientation towards consumption and toward saving for the future
- Adapt working conditions to stimulate healthy environments for work
- Introduce a national performance-based pay system tied to the law with fiscal benefits based on performance tied to productivity and efficiency improvements, and where changes in attitude, motivation and opportunity are rewarded.
- Stimulate and monitor balanced demographic distribution of labour force

- Align effective social welfare policies to creative pay schemes outlined in the integrated labour force proposal
- Synchronize the revision of the tax system with the changes in the labour force structural proposal in order to gain economic growth

The above five core policy areas are very comprehensive and the stakeholders should be encouraged to pursue their development and implementation as they cover most of the areas of concern in the labour market. An implementation and a monitoring plan were also provided. If the plans are followed and the necessary human and other resources dedicated to the process, it would result in a more efficient labour market that will foster greater investment and innovation in Curacao.

#### ***e. Education***

On the whole, as indicated in section III below, it was observed that Curacao is well aware of the importance of education to economic growth and development. In a small island Caribbean state with relatively high labour costs, it is critical that appropriate education, training and exposure be available to help improve the productivity of labour and the quality of output produced thereby enhancing international competitiveness. The Curacao Government has recognized that there is need for reforms in the education sector and as outlined above, public sector and private sector institutions are collaborating to try and facilitate the required changes.

In consultations on the education system, the consultants recognized that evaluations should be conducted to determine the need for reforms in certain key areas including:

- The learning of languages where having to learn Papiamentu, Dutch and English may place undue pressure on children
- The adequacy of quality of learning materials available for teaching Papiamentu
- The possibility that children who in their pre-school years learn only Papiamentu may struggle when they go to school and learning materials are in Dutch
- The possibility that even though the society is proud of its tri-lingual characteristics, many students may not master any one of the languages which may result in them falling behind in other subjects throughout their school life.
- The adequacy of the length of the school day – should it be longer?
- The structure of the secondary education system where there are spaces in High Schools (SBO) for only about 20% of students after the Grade 8 exams. Are students who do not make it into the High Schools and are in the VSBO able to easily matriculate into higher education?
- The adequacy of the number of teachers trained to provide vocational training and its contribution to the low level of skills in the society.

- The non-alignment of the secondary and tertiary education systems with industry which results in a mismatch between skills supplied by training institutions and those required by businesses.

The above factors need to be thoroughly investigated to determine the optimal set of reforms required in the education system from Early Childhood right through to Tertiary Education so that Curacao develops a sustainable human resource stock that has the composition of skills, aptitudes and attitudes required to produce the country's desired economic, social and cultural position.

Generally speaking, there would be a need to renovate the education system, so as to ensure that all children are literate and sensitized to culture and teenagers possess good analytical capacities and professional skills. There is a need for the educational system to train all teenagers to be diligent and to sensitize them to business culture and business administration. Furthermore, given the desirability to foster the cultural sector as a sector of potential economic growth, the educational system could contribute developing in teenagers strong emotional feelings for the art and culture of their country, the Caribbean and Latin American countries, as part of their heritage. Additionally, the educational system should offer a variety of professional specialisations (technical, art, intellectual, etc) and become more responsive to the needs of the Island. Drop out rate in schools should be minimal and all families should be sensitized on the importance of education for their children so as to fully cooperate with the national educational system.

#### ***f. Quality Management System***

There are several initiatives in place or planned in Curacao aimed at fostering entrepreneurship, investment and innovation. The main Quality Management System related initiatives are summarized below:

- Curacao Innovation Centre/Innovatie Centrum Curaçao (ICC)

The Curacao Innovation Centre (ICC) has been in business for about 20 years and focuses on, amongst other things, quality management systems including waste elimination, resource maximization and sustainable business development in a profitable way. The Innovation Centre is a very important entity established to help businesses improve the quality of their standards, become sustainable and inter alia help to raise the skill and productivity levels of workers.

The ICC is currently involved in projects on quality management in the tourism sector to set up classifications of properties and attractions, for example the ICC has audited and set minimum standards for some hotels and for the dive industry and plans to do the same for restaurants. The ICC applies international standards such as HACCP, Green Globe and ISO.

Other important plans for the IC include:



- Introduction of programs for students in secondary education to present proposals on how to improve the education system and
- The setting up of a venture capital fund

With the three key areas of focus of the ICC being Quality, Innovation and Sustainability; the ICC ought to play an integral part in the long term development strategy for Curacao.

- **Kennis Bedrijfsleven Beroepsonderwijs (KBB)**

This foundation supports the synchronization between demand and supply on the labor market. Tutor training for training supervisors within companies on the island is being offered through this foundation. The foundation is also eligible to certify companies which offer tutor training.

Another product offered by the KBB in the area of quality management is the 'Quickscan'. This involves research carried out in the tourist and construction sectors. The research includes the use of an HR application to match labour supply and demand in the selected sectors. The research findings are available on the website of the KBB. The Ministry of Economic Development aims to stimulate research in other sectors in order to provide more information but for now the research is focused mainly on education required and the vacancies offered within the two selected sectors.

- **Business Census**

According to the Ministry of Economic Development, a business environment census is going to be conducted aimed at generating more information on the needs of businesses in Curacao in order to facilitate improvement of the business environment.

- **Curacao Economic Development Board**

Based on information obtained from the Ministry of Economic Development, the Curacao Economic Development Board is in an advanced phase but not yet put into operation. The intention is to streamline and centralize investment promotions and acquisition.

- **ISO Certification**

The Ministry of Economic Development plans to reintroduce the ISO certification for back-office processes in the evaluation of economic permits. The certification expired in 2008. In addition, the Government is the process of centralization and streamlining all economic permits (one window shop concept) but further legal integration is needed.

- **Stimul-IT**

Stimul-IT is a government subsidized foundation which aims to create local opportunities from international developments in the area of ICT, Knowledge Economy & Information Society. In 2013 the foundation plans to focus on achieving a) international standards with respect to e-commerce and online data traffic, b) development of a system to periodically monitor the development of 'Information Society' (ICT Indicators) in Curaçao, and c) the development of Quality processes for the ICT sector (ICT certification).

Furthermore, the foundation is working on several projects to stimulate the use of Information Technology, content creation across media and business. There are plans for the introduction of a technology lab and a business incubator for small businesses in Curaçao.

The above discussion reveals that there are several initiatives planned or already implemented in the area of Quality Management Systems. If these initiatives are implemented, this will augur well for Curacao in terms of attaining international standards and becoming more competitive thereby fostering sustainable economic development.

***g. Intellectual property***

The protection of intellectual property rights typically participate to the legislative arsenal accompanying trade liberalisation and investment. Investors in innovative sectors would of course expect that their IP rights be adequately protected in Curacao. Curacao seems to have already implemented laws, norms and rules that are intended to grant full protection of intellectual property rights in its territory.

**6. Comparisons with successful and less successful development programs in similar small-scale countries in the Caribbean region or elsewhere**

The main objective of this section is to provide a comparison between Curacao's Development Programs with successful and less successful programs in similar small-scale countries in the Caribbean region or elsewhere. This will be carried out by outlining some key elements of the industrial policies of other countries and then identifying the extent to which Curacao is pursuing a similar approach. The analysis will start off by comparing Curacao with Barbados, Malta, Mauritius, Panama and Singapore in terms of certain key indicators including:

- Population (2011)
- Area (Sq. miles / Sq. km)
- GDP (US\$ Billions, current prices) 2011
- GDP Per capita, current prices (US\$) 2011
- GDP Growth 2011
- Main Goods Imports
- Main Goods Exports
- Value of Exports (US\$) Billions 2011
- Value of Imports (US\$) Billions 2010
- Exports of goods and services (% of GDP) 2011
- Imports of goods and services (% of GDP) 2011

- Internet Penetration (% of population) 2011
- UNDP HDI 2011
- Tax Rate on Businesses
- Contribution/ Value added of Total Services to GDP (%) 2011
- Trade in services (% of GDP) 2011
- Ranking in World Bank Competitiveness Index
- Ranking in World Bank Ease of Doing Business
- International tourism, receipts (% of total exports)

The table below shows that Curacao compares favorably with the other countries in terms of some key the variables, especially with respect to its GDP per capita which is relatively high and closer to those in mainland Europe than to those in the Caribbean. Even though Curacao does not have a UNDP Human Development Index rating, it is likely to be very high given that the country has a high per capita income, a relatively high life expectancy (78 years), and a fairly good literacy rate (98%). However, the areas of concern include the slow growth trends in recent years; the relatively small population; the narrow range of export products; the high dependency on imports; and the relatively high tax rates on business. There is scope for a higher Internet penetration rate. Unfortunately, Curacao does not get rated in either the World Bank Competitiveness Index or the World Bank Ease of Doing Business Survey so not conclusion can be drawn.

**Comparison of Socio-economic Indicators**

	Barbados	Curacao	Malta	Mauritius	Panama	Singapore
Population (2011)	278,000	145,619	426,000	1,297,000	3,655,000	5,274,000
Area (Sq. miles / Sq. km)	166 / 430	171 / 444	122 / 320	730 / 2,030	29,762 / 764,340	225 / 700
GDP (US\$ Billions, current prices) 2011	3.68	3.08	8.88	11.31	30.67	239.7
GDP Per capita, current prices (US\$) 2011	\$13,453	\$20,867 (2011)	\$21,209	\$8,797	\$8,590	\$46,241
GDP Growth 2011	0.5%	0.6% (2011)	2.1%	4.1%	10.6%	4.9%
Main Merchandise Imports	Consumer goods, machinery, foodstuffs, construction materials, chemicals, fuel, electrical components	Crude oil, food, manufactures	Mineral fuels, oils and products, electrical machinery, aircraft/spacecraft parts thereof; machinery and mechanical appliances	Manufactured goods, capital equipment, foodstuffs, petroleum products, chemicals	Fuel products, medicines, vehicles, iron and steel rods, cellular phones	Machinery and equipment, mineral fuels, chemicals, foodstuffs, consumer goods
Main Merchandise Exports	Manufactures, sugar and molasses, rum, other foods and beverages, chemicals, electrical components	Petroleum products	Machinery and mechanical appliances, mineral fuels, oils and products, pharmaceutical products	Clothing and textiles, sugar, cut flowers, molasses, fish	Gold, bananas, shrimp, sugar, iron and steel waste, pineapples, watermelons	machinery and equipment pharmaceuticals and other chemicals, refined petroleum products
Value of Exports (US\$)	\$0.4473	\$1.5	\$5.2	\$2.6	\$16.9	\$414.8

	Barbados	Curacao	Malta	Mauritius	Panama	Singapore
Billions 2011						
Value of Imports (US\$) Billions 2010	\$1.55	\$2.5	\$7.3	\$5.2	\$22.9	\$366.3
Exports of goods and services (% of GDP) 2011	47% * 2010	71%	98%	54%	63%	209%
Imports of goods and services (% of GDP) 2011	52%* 2010	96%	93%	69%	78%	97.0%* 2010
Internet Penetration (% of population) 2011	66.9%	46.3%	64.3%	24.8%	43.4%	77.2%
UNDP HDI 2011	Very High Human Development Rank: #47 <sup>th</sup>	N/A but expected to be Very High (Netherlands Rank: #3rd)	Very High Human Development Rank: #36 <sup>th</sup>	High Human Development Rank: #77 <sup>th</sup>	High Human Development Rank: #58 <sup>th</sup>	Very High Human Development Rank: #26 <sup>th</sup>
Tax Rate on Businesses	25%	40.5%	35%	25%	45.2%	27.1%
Contribution/ Value added of Total Services to GDP (%) 2011	74% **	74% *	65% *	70%	79%	73%
Trade in services (% of GDP) 2011	57.7%*	67%	83.7%	51.2%	34.2%	97.9%*

	Barbados	Curacao	Malta	Mauritius	Panama	Singapore
Ranking in World Bank Competitiveness Index	Score: 4.44 Rank: 42 <sup>nd</sup>	N/A	Score: 4.33 Rank: 51 <sup>st</sup>	Score: 4.31 Rank: 54 <sup>th</sup>	Score: 4.35 Rank: 49 <sup>th</sup>	Score: 5.67 Rank: 2 <sup>nd</sup>
Ranking in World Bank Ease of Doing Business	Excluded	N/A	Excluded	23 <sup>rd</sup>	61 <sup>st</sup>	1 <sup>st</sup>
International tourism, receipts (% of total exports)	51.9*	-	17.4*	32*	13.9*	3*

KEY:

\* 2010

\*\* 2009

## SOURCES:

- Population: IMF World Economic Database
- Internet Penetration: <http://www.internetworldstats.com/stats10.htm> 2011 Rankings
- UNDP HDI: <http://hdr.undp.org/en/statistics/> 2011 Rankings
- Ranking in World Bank Competitiveness Index: <http://www.gfmag.com/tools/global-database/economic-data/11863-global-competitiveness.html#axzz290AnGE3S>
- GDP (US\$ Billions, current prices) 2011: World Bank
- GDP Growth 2011: Mauritius, Panama, Netherlands, Malta = World Bank; Barbados: <http://www.gfmag.com/gdp-data-country-reports/320-barbados-gdp-country-report.html#axzz290AnGE3S>
- GDP Per capita, current prices (US\$) 2011: World Bank
- Imports of goods and services (% of GDP): World Bank
- Exports of goods and services (% of GDP): World Bank
- Trade in services (% of GDP) 2011: World Bank
- Tax Rate on Businesses: World Bank
- Contribution/ Value added of Total Services to GDP (%) 2011: World Bank
- Main Imports/Imports: CIA World Fact Book
- Value of Exports/Imports (US\$) Billions 2011: CIA World Fact Book
- Tax Rate on Businesses: World Bank; Barbados and Malta: <http://www.taxrates.cc/html/malta-tax-rates.html>
- Square Km: World Bank

### Overview of Industrial Policies in Other Island States

The following outlines some of the key elements in the development strategies of some of the Small Island States outlined above, namely Singapore, Mauritius and Barbados. This is then followed by a table that identifies some of the key development thrusts in each country and compares them with some of the actual and potential developmental thrusts in Curacao.

	Overview of Industrial Policy
Singapore (Industrial Strategy)	<ul style="list-style-type: none"> <li>- The key elements of Singapore's industrial strategy are strong government policy intervention, initially to jump start industrialisation and increasingly to restructure the economy and encourage specific types of activities; reliance on a free trade and foreign direct investment; investment in physical infrastructure and human capital to ease supply constraints; stable macroeconomic environment and industrial relations; and liberal use of fiscal incentives to lower the tax burden on business.</li> <li>- A key ingredient of Singapore's industrial strategy is the finding niches and creating opportunities. <b>Industry 21</b> identified electronics, chemicals, engineering, life sciences, education and healthcare, headquarters, communications and media, and logistics as industry clusters to be nurtured. Key elements included: <ul style="list-style-type: none"> <li>o A world-class electronics hub in Singapore attracting global leaders with the latest product-design, manufacturing, and applications in semiconductors, ICT products, data storage, and key modules and global leaders in the management of new products, applications and markets.</li> <li>o A chemicals industry cluster, to make Singapore a world-class petroleum and petrochemicals hub based at Jurong Island with S\$40 billion of capital investment targeted (by 2010).</li> <li>o A life science cluster with world-class capabilities in pharmaceuticals, medical devices, biotechnology, agri-biotech products, and food intermediates. Singapore is already a manufacturing hub for pharmaceutical bulk actives.</li> <li>o Nurture engineering to generate growth potential for existing industry clusters and to improve the possibilities for creating new industries by developing multi-disciplinary capabilities and state-of-the-art technologies.</li> <li>o Position Singapore as world-class education and healthcare hub, with emphasis on attracting world-class universities, executive learning centres, corporate training centres, and distance learning providers.</li> <li>o Build the ICT and media cluster into a global hub in Asia for the digital economy offering a wide range of initiatives and developments in telecommunications, IT, media, e-commerce and the Internet.</li> <li>o Build on Singapore's reputation as the premier location for MNCs to attract them to base regional and business HQs</li> <li>o Nurture a logistics and supply-chain management cluster, to develop Singapore into a leading integrated logistics hub for the Asia Pacific region.</li> </ul> </li> </ul>
Mauritius	Mauritius has launched a strategic plan for its industry, covering the period 2010 to 2013 and aimed at improving competition among manufacturing

(Industrial Policy)	<p>companies belonging to Small and Medium-Sized Businesses (SMBs). The government wants to reinforce the SMBs, diversify them by adding value and propelled by science, technology and innovation.</p> <p>In addition to an innovative approach for the promotion of foreign direct investments in order to accelerate the diversification of the Mauritian industrial base, the government aims at the <b>promotion of exports by developing closer links and pacts with importers, the exploitation of niche markets and regional markets.</b></p> <p>The government focus is to promote a <b>sustainable industrial development</b> so as to satisfy the customers in relation to ecological products and encourage industrial operators to adopt clean and more efficient technologies.</p> <p>Mauritius aims at <b>developing a competitive base of human resources</b>, through the access to knowledge, computer science and also learning for life, so as to ensure the development of quality products and services.</p> <p>The vision of the government is to make Mauritius a <b>nation of entrepreneurs</b> by introducing appropriate policies, democratizing economy and by developing a culture of undertaking in the country.</p> <p>The objective is to increase the GDP (Gross Domestic Product) per capita which is currently US\$ 7,100 per capita and to create jobs. The manufacturing sector employs about 26 per cent of the total manpower of the Island, which accounts for about 80 per cent of total export and contributes about 19% of GDP.</p> <p>In addition to encouraging the restructuring and modernization of the textile and sugar sectors, the government is putting much emphasis on the development of the Information and Communication Technologies (ICT sector) and the promotion of Mauritius as a seafood hub in the region, using existing logistics and distribution facilities at the Freeport (free trade zone at the port and airport).</p> <p>To further diversify the economic base and generate sustainable growth, the government is actively encouraging the following economic activities:</p> <ul style="list-style-type: none"> <li>• Land-Based Oceanic Industry</li> <li>• Hospitality and Property Development</li> <li>• Healthcare and Biomedical Industry</li> <li>• Agro-processing and Biotechnology</li> <li>• Knowledge Industry and</li> <li>• Renewable Energy</li> </ul>
Barbados (Productive Development Policy)	<ul style="list-style-type: none"> <li>- Barbados PDP is still very much influenced by the “industrialization by invitation” strategy: that is tax incentives for FDI and a good level of public inputs.</li> <li>- In practice, the strategy of industrialization by invitation consisted of three elements: the creation of a customs union; the creation of a special agency, the Industrial Development Corporation, to drive the industrialization process; and the provision of special incentives.</li> <li>- The Industrial Development Corporation would put in place the necessary infrastructure and would offer the required incentives (protection, subsidies, or tax holidays) to attract foreign investment.</li> <li>- The PDP approach of the country in the last 30 years has been modelled by two very particular aspects of the Barbadian economy. On the one hand, the high economic growth achieved after the independence was led by <b>Tourism</b>, and on the other hand, the country faces the challenges of any <b>small island developing state (SIDS), with difficulties to exploit</b></li> </ul>



	<p><b>economies of scale and scope, which eventually affect the competitiveness of the economy (due to the relatively higher unit costs).</b></p> <ul style="list-style-type: none"> <li>- Both, the possibilities of Tourism to generate long run growth, and the problems of SIDS have been always present in the policy debate of the country, and have shaped the Barbadian industrial policies.</li> <li>- The Government of Barbados has been very active in terms of promotion policies, both through specific market interventions (most prominently, tax incentives) and providing public inputs – this is seen in the Governments' development of the offshore sector in Barbados which is fostered by the <b>numerous International Tax and Investment Treaties</b> the country started signing.</li> <li>- The current framework for the long term development of Barbados is expressed in the National Strategic Plan of Barbados 2006-2025. The six goals of the Plan revolve around the following: <ul style="list-style-type: none"> <li>1. cultural transformation, greater equity and social justice</li> <li>2. improved governance and government administration</li> <li>3. <b>building social and human capital</b> and eradicating poverty</li> <li>4. <b>sustainable development</b></li> <li>5. <b>international competitiveness and economic growth</b></li> <li>6. Enhancing international image through international branding</li> </ul> </li> <li>- <b>Services sector development</b> has been viewed as the way forward for the Barbadian economy. However, the expansion of the services sector would provide a boost for the manufacturing and agricultural sectors. The Plan calls for an export-oriented manufacturing sector producing high quality knowledge intensive products. It also places emphasis on human resources development to support the productive sectors of the economy.</li> <li>- The range of PDP policies in Barbados includes horizontal and vertical PDPs, as well as public inputs and market interventions.</li> </ul> <p>The most salient aspects of the PDP used by the Barbados are:</p> <ul style="list-style-type: none"> <li>o strong horizontal-public input policies,</li> <li>o intensive use of <b>fiscal incentives</b>, which have been vertical in the sense of promoting two sectors: <b>Tourism and International Business</b>, but that have been increasingly incorporating more economic sectors (on the one hand, extending the fiscal incentives to non-hotel tourism related activities; and on the other hand, including as an International Business Centre (IBC) any kind of international businesses and local exporting firms), developing sector specific legislation and strengthening sector specific infrastructure (vertical public inputs)</li> </ul> <ul style="list-style-type: none"> <li>- Overall, the emphasis of the Barbados PDP has been always on <b>export promotion</b>, due to the restrictions of its small island economy, but at the <b>same time protecting the local manufacturers</b>. Following the "industrialization by invitation" this export promotion has been targeted</li> </ul>
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	<p>abroad, through FDI attraction, and not locally.</p> <ul style="list-style-type: none"> <li>- The country faces some challenges in terms of continuing with its fiscal incentive approach. On the one hand, the <b>fiscal deficit and high debt requires fiscal consolidation</b>, and on the other hand, as part of its commitments to the CSME (Caribbean Single Market and Economy) the country has to adapt its tax regime. In addition, the government also has to deal with the consequences of the 'commitment' letter which secured its <b>removal from the OECD's 'harmful tax competition' black-list</b>.</li> </ul>
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Sources:

<http://www.tradechakra.com/economy/mauritius/industrial-policy-of-mauritius-314.php>

Industrial Policies in Barbados - FIEL and SALISES

The Singapore Model of Industrial Policy: Past Evolution and Current Thinking - Chia Siow Yue Singapore Institute of International Affairs

### Comparing Key Development Thrusts of Other Countries with Singapore

County	Key Development Thrust	Curacao Position
Singapore	Investment in physical infrastructure and human capital to ease supply constraints	Roads are a main area of investment. Over 20% of the Budget is spent on education
Singapore	Liberal use of fiscal incentives to lower the tax burden on business.	Curacao has a set of fiscal incentives to attract investment
Singapore	<b>Industry 21</b> identified electronics, chemicals, engineering, life sciences, education and healthcare, headquarters, communications and media, and logistics as industry clusters to be nurtured	Education and healthcare are a focus in Curacao as well as logistics
Singapore	<p>Reducing foreign employees as a percentage of the labour force. Singapore, as laid out in Sections A, B and C of its 2012 Budget, increased its focus on reducing the proportion of foreign workers in the labour force. The rationale for reducing the dependence on foreign workers is explained as follows:</p> <ul style="list-style-type: none"> <li>• Continued increases in foreign workers will test the limits of Singapore's space and infrastructure, despite efforts to build more housing and expand the public transport system.</li> <li>• A continued rapid infusion of foreign workers will also inevitably affect the Singaporean character of the society.</li> <li>• There is also an important economic reason: the easy availability of foreign labour will reduce the incentives for companies to upgrade, design better jobs and raise productivity.</li> </ul> <p>Singapore has a policy variable called the <u>Dependency Ratio Ceiling (DRC)</u> which specifies the maximum proportion of foreign workers that companies in each industry can hire. The DRC is calibrated so that companies in different industries have different maximum ratios depending on the economic and social realities of each industry. Some</p>	<p>Curacao also desires a reduction in the proportion of foreign workers in the labour force because while more foreign workers are being hired there is high unemployment in certain segments of the labour market (especially amongst the youth).</p> <p>Curacao does not have the DRC but an 80/20 rule has been proposed whereby each time a company hires a foreign worker it also has to hire four foreign workers. This proposed 80/20 rule has led to some serious concerns from some employers in Curacao who contend that they cannot find the required skills in Curacao and it makes no sense hiring additional local persons when they are not skilled to fill the vacancies that they have. Some industries, such as the domestic banking industry, have no problem with the rule as they typically hire local employees.</p>

County	Key Development Thrust	Curacao Position
	<p>industries are more dependent on foreign workers than others. Given that Singapore is operating near full employment, it is in a position where it can reduce the DRC so that companies that are heavily reliant on foreign labour will have to find ways to reduce their dependence.</p> <p>The Singapore Budget Speech 2012 stated inter alia the following:</p> <p>“We have to reduce our dependence on foreign labour, and do much more to build an economy driven by higher skills, innovation and productivity, as the basis for achieving higher incomes for Singaporeans..... Our SMEs are in fact the most affected by this challenge. The Government will extend special help to them, so they can reorganize and upgrade their operations, attract Singaporeans to work with them, and be viable and vibrant contributors to our economy years from now..... We will also provide further support for businesses that are innovating, establishing their mark internationally, and capturing growth opportunities in the region and further afield.”</p>	<p>Curacao should consider calibrating the 80/20 rule and perhaps for some industries it should be 50/50 or even 100/0 in industries where there is a well-known shortage of labour.</p> <p>The discussion summarizes some critical policy changes that Singapore plans to implement, and they are similar to what Curacao would like to implement. The big difference is that Singapore has greater capacity to implement and has greater social cohesion which will minimize adverse and opportunistic political reactions.</p>
Singapore	Singapore upholds measures to support its SME sector. Section C of the 2012 Budget Speech outlines that SMEs will have access to Special employment credit (SEC) and a one-off cash grant to help companies offset higher business costs, which may persist in the business slowdown. The grant is sized to benefit smaller companies more.	Curacao has concern for its SME sector and this is reflected in the recent Budgets where approximately NAf 3 million per annum is earmarked for SME support. However, Curacao needs to assess whether more can be done to stimulate even more SME sector development.
Singapore and Mauritius	The exploitation of niche markets and regional markets.	Curacao needs to look for opportunities to trade with Regional markets
Mauritius	Aims at <b>developing a competitive base of human resources</b> , through the access to knowledge, computer science and also learning for life, so as to ensure the development of quality products and services	Curacao has a focus on human resource development and needs to focus more on the development of quality products and services
Mauritius	Make the country a <b>nation of entrepreneurs</b> by introducing appropriate policies, democratizing the economy and developing a culture of undertaking in the country	Curacao has initiatives to foster entrepreneurship
Mauritius	Emphasis on the development of the Information and Communication Technologies (ICT sector) and the promotion of Mauritius as a seafood hub in the region, using existing logistics and distribution facilities at the Freeport	ICT related initiatives are given emphasis in Curacao but there is scope for greater prioritization. There is definitely a strong focus on logistics and distribution facilities in Curacao and Free Zones could be involved. More in depth feasibility studies are required with respect to the logistics hub.

County	Key Development Thrust	Curacao Position
Mauritius	<p>To further diversify the economic base and generate sustainable growth by the government actively encouraging specific economic activities</p> <p>Including:</p> <ul style="list-style-type: none"> <li>• Land-Based Oceanic Industry</li> <li>• Hospitality and Property Development</li> <li>• Healthcare and Biomedical Industry</li> <li>• Agro-processing and Biotechnology</li> <li>• Knowledge Industry and</li> <li>• Renewable Energy</li> </ul>	<p>This project (by TAC) is supposed to recommend priority sectors for Curacao, to date those selected include:</p> <ul style="list-style-type: none"> <li>• Tourism</li> <li>• Financial services</li> <li>• Oil refinery and related activities</li> <li>• Logistical hub and transshipment centre</li> <li>• Cultural services</li> </ul> <p>Curacao is already engaged in <b>renewable energy</b> with wind energy targeted to generate about 20% of the country's energy in the near future.</p>
Barbados	"Industrialization by invitation" strategy - that is, tax incentives for FDI and a good level of public inputs.	Curacao has fiscal incentives for FDI
Barbados	The possibilities of Tourism generating long run growth	This is a priority industry in Curacao
Barbados	Development of the offshore sector in Barbados which is fostered by the <b>numerous International Tax and Investment Treaties</b> the country started signing	Curacao is very interested in re-invigorating the Offshore financial sector but is limited by OECD positions as well as relatively few International Treaties.
Barbados	Service sector development - placing emphasis on human resources development to support the productive sectors of the economy	Curacao has a similar development thrust

On the whole, the above analysis shows that Curacao's development thrust has some similar features as Singapore, Mauritius and Barbados. In addition, Curacao has many studies that have examined several of the key areas identified above. It is critical that Curacao begins the implementation of the initiatives identified in previous plans as well as any lessons that can be learned from other countries such as Singapore, Mauritius and Barbados. Many of these initiatives will be brought to the fore in this Consultancy, which will also provide an implementation plan and recommend the use of democratic dialogue to enhance the level of social cohesion in Curacao. With a robust implementation plan and more cohesion amongst critical stakeholders (political parties, labour unions, employers, NGOs, etc.), Curacao should resolve its development challenges and attain long term sustainable development.

## B. Impact assessment (10 years) of the identified strategy

### 1. Economic Growth

In Chapter III, an application of the Hausmann, Rodrik and Velasco (HRV) growth diagnostic framework highlighted constraints that contributed to low productivity and long-term growth rates. As mentioned earlier, the diagnostic is expected to function as a complement to quantitative modelling and thereby we engage in a modelling exercise in what follows.

First, we begin with a discussion on model construction, where we show the use of the most commonly accepted tool for long-term economic growth projections, based on assumptions on labour and capital availability as well as gains in productivity.

A second section is devoted to the evaluation of empirical results on both Curacao and a sample of “look-alike” countries; this allows us to highlight the broad areas among labour, capital and productivity that may have the highest impact on Curacao’s long-term GDP growth. The international comparison also allows us to highlight the major differences between the countries in the sample and Curacao and therefore the key macro directions to be followed in order to increase the long-term potential of Curacao’s GDP.

A third section looks at the quantification of alternative scenarios, translating potential changes to Curacao’s production function into broad areas of macroeconomic policy and using the benchmark countries to test plausible assumptions.

The last section includes a summary and key recommendations for long-term macro strategy.

#### *a. Conceptual background and parameters for long-term GDP projections*

To start, a commonly used functional form is used to evaluate potential growth, i.e. a Cobb-Douglas (CD) constant-returns to scale production function. Given the small market size of island states, it is relatively easier for one or two large projects to suddenly raise long run growth. However, in the absence of a standalone functional form for islands the CD production function has been the preferred method in past studies on island economies, e.g. Cashin and Loayza (1995), Collins and Bosworth (1996), Easterly and Kraay (2000).

Therein, an economy’s key factor endowments are captured by including variables to represent capital, labour, and technology:

$$Y = AK^{\alpha}L^{1-\alpha} \quad (1)$$

Here Y, K, L, and A denote output, capital, labour, and technology, respectively. The latter component will receive greater elaboration later in our discussion. The function implies that GDP can grow only if

there is growth in productive inputs, including the level of technology. To estimate the growth rate of output the equation is partitioned into two general parts, one related to factor accumulation and the other technological progress. After conducting a log transformation of equation (1) and taking the derivative with respect to time, we are left with:

$$\frac{\dot{Y}}{Y} = \alpha \frac{\dot{K}}{K} + (1 - \alpha) \frac{\dot{L}}{L} + \frac{\dot{A}}{A} \quad (2)$$

Now, in the above equation we have the growth rate of output  $\left(\frac{\dot{Y}}{Y}\right)$ , capital  $\left(\frac{\dot{K}}{K}\right)$ , labour  $\left(\frac{\dot{L}}{L}\right)$ , and a representative variable for technological progress  $\left(\frac{\dot{A}}{A}\right)$  or, as often described, total factor productivity (TFP) growth. Output growth is measured using real GDP. The capital stock variable is calculated according to the method used by Mankiw, Romer and Weil (1992) as well as Benhabib and Spiegel (2005). This method is applied by computing the initial capital stock, with a base year of 1996, using the following formula:

$$\left(\frac{K}{Y}\right)_{1996} = \frac{I_k/Y}{g + \delta + n} \quad (3)$$

Where  $I_k/Y$  is the average share of physical investment in output from 1996 to 2011 while  $g + \delta + n$  respectively represent average TFP growth, the rate of depreciation and average population growth.

Given an initial capital stock estimate, physical capital is thereafter derived from the accumulation of gross physical investment and depreciation estimates of existing capital stocks. This standard approach is termed the perpetual-inventory method:

$$K_t = (1 - \alpha)K_{t-1} + I_t \quad (4)$$

Here  $\alpha$ , the capital share, is equal to 5.0%<sup>176</sup> and  $I_t$  reflects gross fixed capital formation (constant local currency unit). The labour variable is approximated by the population between 15 and 64 years old and in the absence of such data total population was used as a proxy. Once we have all the required variables technological progress is then calculated:

$$\frac{\dot{A}}{A} = \frac{\dot{Y}}{Y} - \alpha \frac{\dot{K}}{K} - (1 - \alpha) \frac{\dot{L}}{L} \quad (5)$$

With all the factors accounted for, we take the historical average of the rate of capital accumulation, which reflects the use of equation (3) and (4), technological progress, from equation (5), and labour growth. Making the assumption that these values will remain more or less constant going forward, equation (2) is utilized to derive our forecast of potential growth.

<sup>176</sup> This assumption is taken from the growth literature, e.g. Elias (1990).

**b. Summary of results and benchmark comparisons**

Given our parameters and the available data, which were chiefly taken from the IMF, crisis periods were removed from the data sample to better reflect normal growth conditions, leaving us with a sample period of 2002-2008<sup>177</sup>.

For Curacao over the next ten years, the production function ultimately gives a long-term GDP growth figure of around 1.7%. This is more than double the amount recorded in 2011. The only time when real economic output registered such a pace was in 2007 and 2008 where real growth came in between 2.0-2.5%. Notwithstanding the pickup in global commodity prices, the fact that growth exceeded the island's potential capacity during that period likely contributed to the robust inflation gains around the same time, which stood at 3% (2007) and 6.9% (2008). Otherwise, the last time rates reached or surpassed 1.7% was in the early 1990s<sup>178</sup>, during which time output growth consistently hovered close or above the long-run level.

If this average 1.7% per annum GDP growth is attained and sustained over the next 10 years, it is expected that national income (at constant prices and unchanged exchange rates) would increase by about USD 200 million (to a 2017 GDP estimate of USD 2.5 bn). In other words, more than twice the change observed during 1998-2008<sup>179</sup>. Meanwhile, this should expand the pool of national savings.

As a caveat, it is important to note that this results from the structural characteristics of the model, which does not capture institutional or cyclical variables, e.g. the quality of monetary/fiscal policy management, or potential self-reinforcing effects between capital and labour growth on one side, and TFP growth on the other side. Nonetheless, it does offer a very robust and internationally accepted gauge of the economy's potential capacity.

Earlier on in this study we identified structural and cyclical factors wherefrom to isolate islands that most resemble Curacao in this nature. Those that displayed close similarity were the following high-income non-OECD island economies: Bahamas, Barbados, Trinidad and Tobago, and Singapore. After deriving long-run growth for each of the reference islands, a group average is calculated. When compared to the results obtained on long-term GDP growth potential for this benchmark group estimate (4.3% per annum), Curacao's present growth potential is far below this mark. Nonetheless, if at least some of the binding constraints identified by the HRV growth diagnostic are implemented, it is quite possible to gradually close this 1-2%<sup>180</sup> gap.

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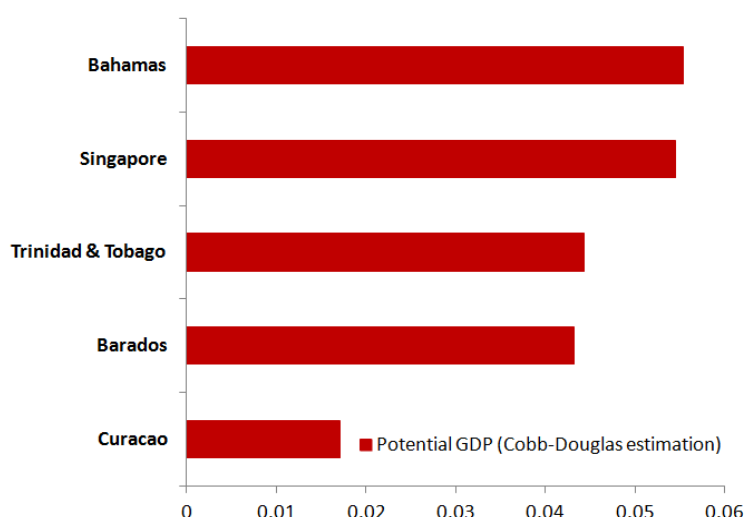
<sup>177</sup> The time-horizon for Trinidad and Tobago is from 1999-2008.

<sup>178</sup> Using Netherland Antilles data from the IMF

<sup>179</sup> Note that the time-horizon includes more than two years of negative growth. Based on IMF data.

<sup>180</sup> The Bahamas and Barbados together average a long-run rate of about 3.5%

Figure 69 Potential GDP growth



Source: IMF, CBS, TAC

Given that the benchmark islands have already been shown to display a relatively close resemblance in terms of structural and cyclical conditions, we list these benchmark islands and their respective capital, labour, and total factor productivity (TFP) contributions to growth (see next table).

Table 20 Sources of growth, 2002-2008 (average annual growth rates)

	Annual GDP growth	Contribution from Capital	Contribution from Labour	TFP growth
<b>Curacao</b>	0.011	0.0067 (59%)	0.0043 (38%)	0.0003 (2%)
<b>Bahamas</b>	0.054	0.0343 (64%)	0.0068 (13%)	0.0128 (24%)
<b>Barbados</b>	0.043	0.0266 (62%)	0.0041 (10%)	0.0123 (29%)
<b>Singapore</b>	0.058	0.0315 (55%)	0.0132 (23%)	0.0132 (23%)
<b>Trinidad &amp; Tobago</b>	0.038	0.0196 (52%)	0.0059 (15%)	0.0125 (33%)

Source:  
TAC

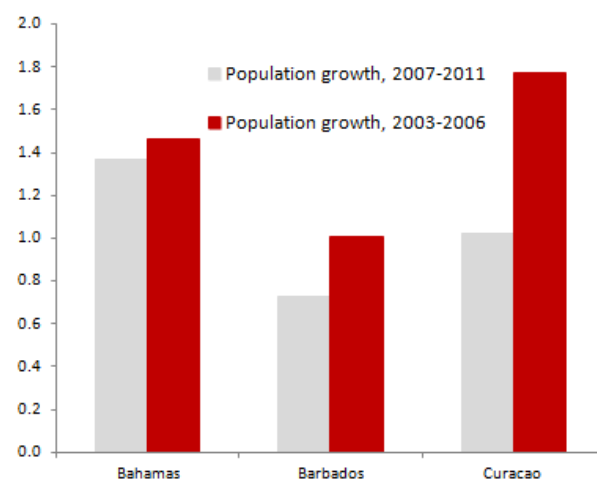
For Curacao, much of the trend growth in economic activity (59%) appears to stem from capital accumulation, like all our benchmark countries, with labour growth offering some support. Although capital is typically the main foundation of growth for developed countries, it is common to find total factor productivity (TFP) growth as the second leading driver. This is generally the case for every



reference economy, save for Curacao. Whether considered alone or relative to its benchmark peers, the contribution of TFP is negligible, averaging a growth contribution of only 2%. On the whole, this appears to be the leading impediment to the long term growth success of Curacao.

In terms of the two countries within our reference islands that appear to show the closest resemblance to Curacao, i.e. Barbados and Bahamas, economic activity receives a significant contribution from capital accumulation and relies relatively little on labour growth. Meanwhile, Curacao's labour contribution is larger than the two by at least a factor of 2, pointing towards greater reliance on labour market expansion. This partially reflects the presence of a larger manufacturing sector than the aforementioned Caribbean islands; nonetheless, as rapid or abrupt changes in population are not uncommon in small islands in relation with changes in migration flows, this relative “excessive” weight of labour contribution to potential growth point towards a higher vulnerability of the country to oscillations in population growth.

Figure 70 Population growth rate

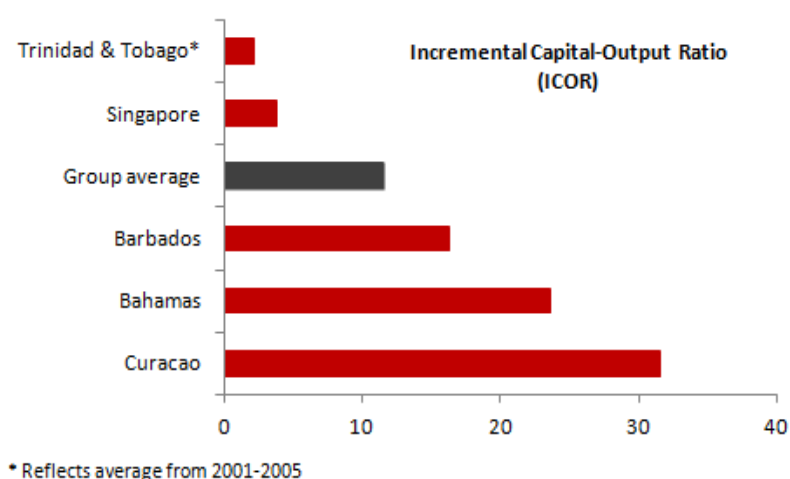


Source: CBS, World Bank

Even though the contribution share from capital accumulation generally aligns with our reference countries, this has not necessarily translated into greater productivity. A measure of whether capital is productively utilized, the high incremental capital-output ratio (ICOR)<sup>181</sup> for Curacao over the same period generally corroborates this fact by implying that capital is being absorbed inefficiently.

<sup>181</sup> ICOR = Average annual share of investment-to-GDP / Average annual growth rate of GDP; the higher the ratio, the lower the productivity of capital investment.

Figure 71 Capital-output ratio



Sources: TAC, World Bank, CBS

As attested to by the TFP results in Elias (1990), Baier et al. (2005), and Quijada (2006), among others, negligible TFP growth rates are not uncommon. For instance, Elias (1990) shows that for Latin American economies over the period 1980-1990 TFP estimates are low and typically negative.

In addition to levels of human capital and the introduction of new technology, the aforementioned studies assert that TFP also captures the progress of institutional quality. And hence, low values can also reflect issues such as deteriorating market competition and increases in government regulations. Moreover, in Quijada (2006), a study by the central bank of Colombia on institutional quality and TFP within Latin America and the Caribbean, regulatory soundness and quality of economic policy are confirmed to have a significant influence on productivity rates. The literature on institutional quality and productivity is vast and several leading authorities on economic growth and economic development have emphasized this relationship, including Acemoglu et al. (2001), Rodrick et al. (2004), and Eslava et al. (2006).

Overall, this reinforces the conclusion of the growth diagnostic that the most binding constraints to long-run growth stem from low human capital and ineffective governance related to micro risks (e.g. taxes, labour regulations, and administrative barriers).

### c. Scenarios

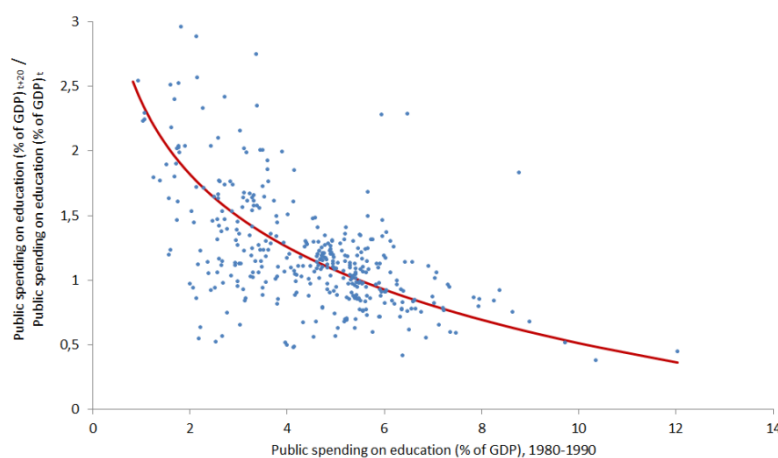
To test the possible impact of implementing at least one of these reforms, a scenario analysis is conducted to determine the resulting change in long-run growth from rising human capital.

### Improving human capital

As a proxy for human capital we use public expenditure on education as a % of GDP. Due to a dearth of available data<sup>182</sup>, we use a general approximation of the average transition path in public education spending (% of GDP) across all countries with data from 1980-2010<sup>183</sup> and apply a human capital projection method akin to Poncet (2006)<sup>184</sup>. The graph below illustrates that on average economies with an initially low level of expenditure on education (% of GDP) tend to record stronger growth in spending during the earlier years of their development cycle while those with already high levels tend to see relatively little change, which is reflective of the general trend of an economy transitioning along its development path. The estimation of this trend is depicted below.

Figure 72 public expenditure on education as a % of GDP

$$\frac{H_{t+20}}{H_t} = -0.81 \log(H_t) + 2.4$$



source: TAC, World Bank

Using the results from the abovementioned estimation and the decomposition definition of broad capital found in Mankiw et al. (1992)<sup>185</sup>, we run the scenario analysis. As observed in the following illustration, a one percentage point increase is estimated to raise the island's growth potential to about 2%, while increasing it by two and a half percentage points (placing it in the vicinity of the group average) raises the growth figure to approximately 2.3%. Meanwhile, this figure can reach just south of 3% if Curacao matches the 6% level commonly recorded by Barbados, the leading public spender amid the benchmark countries.

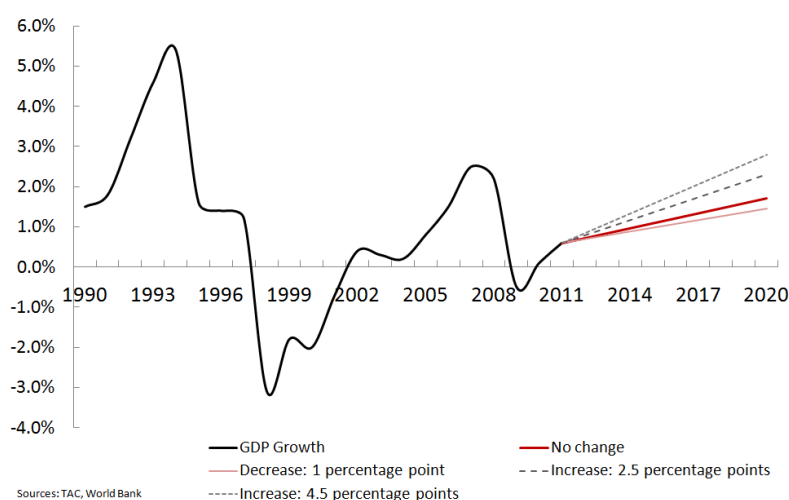
<sup>182</sup> Netherlands Antilles data on public education spending (as % of GDP) was only available for the 1990s. Given the generally low variability observed over time in our reference countries, we use the Netherlands Antilles figure of 1.5% as our base case, akin to that recorded by high income Bermuda for the much of the 21<sup>st</sup> century.

<sup>183</sup> Whenever data is available

<sup>184</sup> There was generally a dearth of data on average years of schooling for our benchmark countries (i.e. the extant sample size was either inadequate or data availability was inconsistent) and thereby education spending was used as a second-best proxy for human capital.

<sup>185</sup> Broad capital is decomposed by allotting a 60% share to human capital and a 40% share to physical capital

Figure 73 Scenario 1: Potential GDP from human capital shock



### Improving business environment and investment attractiveness – Factor synchronization with higher growth countries

The issue of overall business environment and the insufficient degree of attractiveness for companies and investors to invest were among the key factors behind Curacao's relatively poor economic performances. Here, we make a simple but robust attempt at assessing what could be the impact of substantial improvement in such critical areas.

Using our sample of benchmark countries, we focus on the two with obvious advantages in terms of business environment, Barbados and Singapore. We assume that the higher level of overall capital accumulation (investment effort) and the relationship between labour and capital dynamics are globally reflecting the differences in business environment, i.e. we consider the possible outcome if Curacao manages to synchronize its capital and labour growth with the long-run<sup>186</sup> exhibited by our reference group, which therefore implicitly assumes that Curacao could emulate the reference countries' business environments.

Table 21 Factors fuelling negative sentiment

- Negative market prospects: no growth and no new market opportunities
- Decrease in profitability: several companies are struggling to survive
- No or not sufficient investment opportunities on Curaçao
- Scarcity of motivated and qualified workers
- Government and politics do a poor job in terms of image of local politics, Central Bank, good governance and corporate governance, providing the right conditions, services and facilities to let the private sector flourish

Source: Economic Prospects for Curacao (2012)

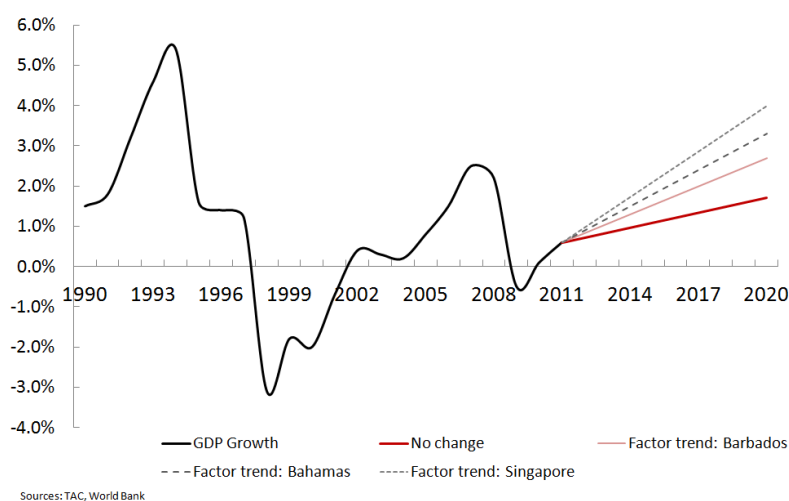
Overall, the results are equally encouraging. In general, just reflecting the average long-run historical factor trend for the entire group is estimated to boost potential output to about 3%<sup>187</sup>, not too far off

<sup>186</sup> Calculated by taking the average over the entire time-horizon

<sup>187</sup> Trinidad and Tobago is not included here in this average

from Barbados. On the other hand, reflecting the trend of Singapore, though ambitious<sup>188</sup>, would lift the long-run growth rate to 4%.

Figure 74 Scenario 2: Potential GDP from factor synchronization



As mentioned earlier, in order to fully reflect the response of long-term growth to increases in investment a similar business environment needs to be fostered; considering this fact, TFP can be used as a proxy of institutional quality. Many different statistical regressions were run for individual group members in our sample of benchmark countries, using TFP growth as an explained variable and business condition variables from the World Economic Forum (WEF)<sup>189</sup> as explanatory variables.

Despite statistical difficulties, the results are generally congruent with what was underlined in the HRV growth diagnostic: we find labour market efficiency and goods market efficiency to have a significantly positive impact on the TFP growth of group members. Individually, labour market efficiency is more important to the business environment in Barbados while for Singapore it is goods market efficiency. Hence, this exercise suggests that for Curacao to fully benefit from an increase in investment, akin to that seen in Singapore or Barbados, there also needs to be an improvement in goods market efficiency and labour market efficiency.

#### d. Conclusions and macro recommendations

All decisions have trade-offs and in this case they vary depending on the measure implemented. Improving human capital investment will weigh on the fiscal budget, increasing private investment will likely result in higher imports and thereby widen the current account shortfall, while attempts to improve the business environment may result in political opposition and tax reductions, impairing

<sup>188</sup> Indeed, Singapore has many “strong” specific features that make emulation more difficult for a small island like Curacao

<sup>189</sup> Whenever data is available

government revenue. For human capital investment, much of the fruits of investment will likely be born over the medium – long run and thereby whether an economy can withstand short-term budget pressures will depend on Curacao's present public debt sustainability, which we evaluate in the subsequent section. Meanwhile, until foreign exchange reserves return to comfortable levels, raising investment needs to be approached with caution. Given that foreign exchange reserves are presently low, any action would serve as a drain on reserves and potentially threaten balance of payment sustainability, a matter of later discussion.

For the moment, tending to constraints related to ineffective governance offers the greatest short-term returns, including key elements on taxation<sup>190</sup>, labour market, and regulatory hurdles.

Table 22 Scenario summary table

	Potential shock	Long-run growth outcome, %
<b>Human capital*</b>	No change	1.7
	Decrease by 1 percentage point	1.5
	Increase of 2.5 percentage points	2.3
	Increase of 4.5 percentage points	2.8
<b>Improving investment attractiveness **</b>	No change	1.7
	Barbados	2.7
	Bahamas	3.3
	Singapore	4.0

\*Public education spending as % of GDP

\*\* Factor synchronization

After highlighting in the previous chapter that the most binding constraints were low human capital and ineffective government policy related to micro risks (e.g. taxes, labour regulations, and administrative barriers), we confirmed here with the use of a Cobb-Douglas production function that, under the current structural characteristics of the country, Curacao's long-run growth remains low, slightly below 2% per annum over the next ten years. Moreover, the results indicated that total factor productivity growth is also low and has contributed relatively little to overall economic growth.

The subsequent scenario analysis, however, illustrated that substantial gains in potential growth are possible for Curacao if these constraints are ameliorated. For instance, Curacao stands to gain an additional 0.5 – 1 percentage point of average annual GDP growth if government spending on public education increases to somewhere between 4 – 6% of GDP. Meanwhile, mimicking the average long-run factor trend of the reference group offers larger returns, with an additional potential gain of as much as 2 percentage points of additional annual GDP growth. However, this would need to be

<sup>190</sup> The extent of tax reduction will be conditional upon the strength of the government's public debt sustainability.

complemented by an improvement in the business environment, as pull factors such as goods market and labour market efficiency also play a part in bolstering and sustaining investment.

Provided that the government is able to ease these constraints, private returns should rise and encourage investment, leading to an increase in investment demand. The increase in investment demand is likely to ease the presence of poor financial intermediation, as rising returns to economic activity motivates an increase in credit allocation towards a broad set of investment projects, preferably in the external sector. Greater investment in the external sector (e.g. financial services and tourism) and human capital (e.g. education and health) would not only augment the sector's foreign-exchange reserve generation capacity, but also offer the island an opportunity to enhance the quality of goods and especially services exports, thus moving up the value chain. Moreover, less costly labour regulations would provide a needed boost to export competitiveness, as the share of outbound shipments against world or Caribbean exports has generally been on the decline since 2002. For these and other reasons reserve levels are likely to expand, reducing the need for high domestic savings and narrowing the current account shortfall to more sustainable levels.

## **2. Key factors for sustainability**

This section of the report seeks to apply various sustainability parameters to the scenarios mapped out above and the discussions surrounding the growth potentials for Curacao. It remains cognizant that Curacao is a small island developing state (SIDS) and therefore will have some constraints not necessarily seen in the more developed countries belonging to the Organization for Economic Cooperation and Development (OECD). Nonetheless, there remain a number of pragmatic steps the Government and people of Curacao will need to apply to insulate themselves against continuously reacting to a perpetual state of crisis. But every action is likely to have some potential negative impacts. It is therefore contingent upon the authorities that the necessary policy environment is created for the development and/or enforcement of the requisite regulations to mitigate negative externalities. The discussion on key sustainability factors is not exhaustive, but focused and targeted to the realities of Curacao. The identification of key actions and development of indicators of progress serve at least three (3) purposes: First, they cover issues that are relevant for sustainable development in Curacao and which are comparable with similar SIDS. Second, they provide critical information not often viewed or discussed in the economic development literature and therefore are not routinely captured. And third, the development of indicators around these measures can be calculated by Curacao with data that is either readily available or could be made available within reasonable time and costs. Lastly, the section seeks to ascertain what Curacao may have to do to ensure that its progress is not short-lived but can also benefit current and future generations.

**a. Environmental sustainability**

Environmental sustainability is often viewed as synonymous with the colour green - and for good reason. Twenty years ago at the first Earth Summit in Rio de Janeiro, leaders set out what today is conventional wisdom: human progress - both social and economic - cannot be divorced from environmental protection. Unless both are advanced together, both will flounder or fail (UNDP, 2012). It has grown in prominence given that climate change remains arguably one of the most serious threat to Curacao's development aspirations.

Curacao's economy has remained sluggish over the past decade and the proposal to stimulate the economy is net capital formation and increased productivity mainly through technological advances and skills training. Rapid growth is necessary to meet and sustain the urgent development needs of Curacao, encouraged by tourism expansion, investment in infrastructural expansion, and climate compatible development. But rapid growth must be accompanied by the necessary environmental standards and safeguards, such as the enactment of environmental policies, standards and regulations.

Furthermore, growing the gross domestic product (GDP) through increased economic activity in the infrastructural and tourism sectors, for example, at any cost can create severe environmental problems, if the necessary regulatory framework is not established and laws enforced (see matrix below).. For example, despite China's impressive growth over the past decade, the country's economic losses due to pollution and environmental degradation accounted for 10.51 percent of gross national income in 2008 (World Bank, 2007). As such, Curacao will need to be cognizant of the fact that an extensive growth model that relies heavily on capital formation and significant environmental degradation, i.e., pollution, destruction of vital coral reefs from land and marine sources, poor waste disposal, and heavy dependence on fossil fuel is not sustainable. Curacao has to seek to avoid the "grow dirty now and clean up later" mentality; getting locked into unsustainable economic developmental pathways that cause irreversible environmental damage. Additionally, growth will be unsustainable in the long-run unless it is both environmentally sustainable and socially inclusive – the former ensuring that the island's natural assets are able to adequately provide the resources and environmental services on which the island's inhabitants depend. Curacao will need to find the balance between growing fast while simultaneously preserving the integrity of her natural assets through the enactment and enforcement of adequate environmental regulations, such as air, water, and noise quality standards, as it has been proven that good environmental policies both enhance productivity and alleviates poverty (World Bank, 2012).

Lastly, it cannot be assumed that environmental performance will improve automatically with income. As such, policy action is needed, and becomes even more urgent as in time it may become prohibitively expensive or impossible to "clean up later" either because of the irreversibility of environmental damage (such as corals damaged from agro-chemicals and other chemicals associated



with the petroleum and tourism industries), or because “lock-in” will make subsequent shifts to more environmentally benign structures and processes extremely costly.

The perceived conundrum, therefore, is whether Curacao can ensure rapid growth that is sustainable. The answer lies in ensuring well-designed green policies are pursued; policies that are cognizant of climate change, and focuses on the pillars of Curacao’s growth strategy, inclusive of tourism and infrastructure enhancement. The current cost of energy in Curacao, for example, and as pointed out elsewhere in this report, is too expensive based on the dependence on fossil fuel to allow for value added and competitive manufacturing industries. A transformation towards an economy that has a more sustainable energy mix between renewable (wind, solar and geothermal energy)<sup>191</sup> and non-renewable energy is needed. Furthermore, near term costs in pursuing a green strategy can be minimised through the use of well-designed regulations and market-based instruments that promote least-cost ways of protecting the environment. Green growth can then provide a pathway to more sustainable development that reconciles the urgent need for sustained growth with the imperative of avoiding lock-in to unsustainable growth patterns and irreversible environmental damages. This is similar to the approach being taken by Barbados, the Commonwealth of Dominica and Guyana in their Green Economy and Low Carbon Development Strategy.

But from the fieldwork and consultations held as part of this project, it can be concluded that one of the main constraints in the uptake of green technology and infrastructure expansion in Curacao, is a knowledge gap on the principles of pursuing development resilient to climate change and the path to be followed in implementing this concept. Conducting capacity building in Curacao on topics related to low carbon economies, climate compatible development and the green economy to allow for greater technological uptake and transformational change will require candid discussions, behavioral change and a modified policy environment.

Knowledge of the principles of low carbon operations and the successes being realized by countries/regions/operators should help stakeholders understand and buy into Curacao’s emphasis on green technology. Additionally, the packaging of existing initiatives undertaken in the Caribbean region, inclusive of the activities undertaken under the Regional Implementation Plan to address climate change 2011- 2021, Special Pilot for Adaptation to Climate Change (SPACC), the Carbon Neutral Tourism Project and the Pilot Project for Climate Resilience (PPCR) and the Comprehensive Disaster Management (CDM) Projects are but a few, will allow for an understanding of how varying projects are being coordinated to benefit countries and also work collaboratively with stakeholders in assessing and understanding current operations.

The main capacity themes that have been largely responsible for a lack of technological uptake are a need for appropriate legislation, adequate funding, additional training and heightening public

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<sup>191</sup> Good examples of where these are being pursued already exist in the region, such as the wind farm in Jamaica, solar water heaters that are extensively utilised in Barbados and to drive water systems in the Grenadines, and geothermal energy in St. Kitts and Nevis.

awareness. Furthermore, technological transformation in the energy sector must be treated as a shared responsibility amongst governmental, non-governmental agencies, community groups and individuals. National, local and regional governments, NGOs, civil society and local communities all require support to improve their systemic, institutional and individual capacities.

A great deal of time, effort and resources has been invested into various technology reports, and impact and vulnerability assessments, and research that can inform green development in Curacao (Ecorys, 2011). In some cases, many of the recommendations and guidance have not been acted upon. Reports sit on shelves through lack of resources, baseline data sets are often difficult to access, technical knowledge is lost as staff retire or move out of the country. Retaining and growing technical, professional, managerial and academic research expertise and capacity are vital.

It is critical for Curacao to enhance research into natural disasters, extreme weather events, climate variability and change, and impact modeling to provide data and support for non-natural scientists engaged in sustainable development and the preparation of adaptation and mitigation strategies.

Similarly, Curacao has a comprehensive tourism master plan but the challenge would be to ensure that the very resources on which the sector depends are not eroded. In this context therefore, the possibility of promoting Curacao as a carbon neutral destination should be explored. Carbon Neutral Tourism is a term that has first been introduced in the context of climate change and is consistent with a low carbon or green economy strategy. Carbon neutral tourism implies the offsetting of a destination's carbon footprint by means of processes balancing carbon emissions, such as planting trees or investing in new energy sources.

The tourism industry inevitably contributes its share to climate change: 5.3% of global CO<sub>2</sub> emissions are generated by the tourism industry, of which 94% of all tourism-related emissions are caused by air transportation (Viner & Nicholls, 2006). But this should not preclude the authorities in Curacao in pursuing operational, technological and growth aspect of tourism and transportation, rather than simply neutralizing carbon emissions. This strategy is about to be pursued in the Bahamas under a pilot programme.

Given the forgoing, specifically, Curacao will need to:

- Tailor its national development strategy to encompass a green component, with an emphasis on maximising local and immediate benefits and avoiding lock-in.
- Promote efficient and sustainable decision-making by policy-makers, consumers and the private sector. The use of pollution charges and other market-based instruments are important because they help incentivize efficiency and spur innovation. An array of complementary approaches will be needed to nudge individuals toward better behaviours and to unleash the power of the private sector. Critically, while we are still far from accurate pricing for ecosystem services, they are clearly valuable. Natural assets should be systematically incorporated into national accounts. The UN Statistical Commission adopted the System of Environmental and Economic Accounting as an international standard in February 2012, providing a broadly

agreed methodology. Neglecting natural capital, like neglecting human and physical capital, is bad economics and bad for growth.

- Meet up-front capital needs with innovative financing tools. Given the scarcity of fiscal resources, the government and financial institutions (domestic and international) must work urgently to increase the role of the private sector in green investment. Private-public partnerships are crucial, as is increasing access to financing for small and medium enterprises.
- Promote technology policies that encourage cost-effective green innovations instead of prescribing specific green technologies to be adopted by individual firms.
- Develop an environmental and a climate policy and ensure that it focuses on the specific activities with significant co-occurring benefits that can lead to economic growth, job creation, energy security, and environmental protection.
- Ensure sustainability policy making that reflects the preference of Curacao's citizens for maximizing the balance between economic output and environmental quality.

**Table: Matrix of Potential Significant Impacts and Mitigation Measures**

Medium	Potential Impact	Mitigating Action
Green Technology	1. Reduced cost of energy	
	2. Increased energy security	
	<b>3. Reduced foreign exchange leakage</b>	
	<b>4. Reduced carbon emission</b>	
Tourism	1. Indiscriminate disposal of waste	Develop an integrated waste management strategy
	2. Soil erosion due to removal of vegetation associated with change land use	Enhanced land use planning and environmental impact assessment being mandatory
	3. Contamination of soil profile from toxic waste from construction material	Enact environmental policy and regulations
	4. Water pollution from indiscriminate disposal of waste	Enact environmental policy and regulations
	5. Ecological damage resulting from construction works and clearance	Make EIAs mandatory
	6. Better Zoning	
	7. Employment creation	
Infrastructure	1. Increased pollution and indiscriminate waste disposal	Develop and enforce an integrated waste management plan

	2. Damage/disturbance to areas cultural and historical value	Make EIA mandatory
	3. Disruption of commercial activities	Better land use planning
	4. Enhancement in property values	
	5. Enhanced quality of life	

Ultimately, much of what is needed to green growth Curacao is good growth policy, which aims to get prices right and fix markets, address coordination failures and knowledge externalities, and assign property rights. But green growth policies are no panacea for structural shortcomings in an economy: environmental measures cannot offset macroeconomic instability, distorted labour markets, poorly regulated financial systems, lack of confidence in the economy or hostile business environments.

#### ***b. Social / Labour sustainability***

Social sustainability remains an independent and important dimension of sustainable economic development. As such, any further plans or scenarios for Curacao's development prospects must look at the potential impacts on the Island's social assets, inclusive of education, skills, experience, consumption and employment.

Economic development in Curacao has long been fixated on the construction of hard infrastructure such as sewers, roads and electrical, gas and water utilities, and other aspects of the physical infrastructure that define the Island's form.

But for Curacao to have sustained economic development based on the scenarios identified above, the country has to be viewed beyond its physical form. This is an Island composed of people as well as the places where they live; it is as much a social environment as a physical environment. Thus, in moving forward, Curacao must not only be environmentally sustainable, but socially sustainable and desirable as well

Of course, social sustainability will not be created simply through enhancing the physical infrastructure of the Island, but must be built on the rich culture that Curacao possesses. These are advantages to be exploited by the Island's inhabitants and policy-makers alike.

In examining social sustainability issues with regards to the scenarios outlined above it is important to understand that it requires a system of economic activity that is compatible with and not destructive of the social web of life of which we are a part, and upon which we depend for our health, well-being and quality of life. Thus, in seeking to advance Curacao's developmental prospects, must simultaneously be asking whether the strategy to be followed:

- Will foster the achievement of the basic needs of the Island's populace, inclusive of food, shelter, education, work, income and safe living and working conditions;
- Promote equity, ensuring that the benefits of development are distributed fairly across society;
- Enhances, or at least does not impair, the physical, mental and social well-being of its population;
- Promotes education, creativity and the development of human potential for the entire Island's population;
- Preserves the cultural and biological heritage of the Island, thus strengthening its sense of connectedness to its history and environment;
- Promotes conviviality, with people living together harmoniously and in mutual support of each other;
- Is democratic, promoting citizen participation and involvement, and
- Is liveable, linking the form of the city's public places and city dwellers' social, emotional and physical well-being.

Curacao will have to be prudent in its strategic framework to ensure that it does not grow brilliantly but succeeds miserably through a failure of social cohesion or a worsening of the social fabric that is essential for the Island's long term sustainable development prospects. Capital accumulation and technological advances must be accompanied by the necessary investment in education, skills training and an enabling environment that will afford all of Curacao's population the opportunity, should they wish, to participate in the Island's developmental thrust. Projected faster growth, based on the strategy outlined above must as a precondition lead to greater equity and quality of life for Curacao's population. Youth unemployment and disaffection must be tackled, and crime, though still relatively low in relation to other Caribbean States, must be arrested now if Curacao is to continue to be seen as an important tourist destination.

For better social sustainability Curacao must commit itself to accelerating progress to achieve Millennium Development Goal through pursuing job-intensive, sustained, inclusive and equitable economic growth and sustainable development to promote full and productive employment and decent work for all, including for women, young people, people with disabilities and rural populations, and promoting small- and medium-sized enterprises through initiatives such as greater skills enhancement and technical training programmes, vocational training and entrepreneurial skills development that have specific job-focus, such as building capacity for Curacao's transformation to a green economy making maximum use of local resource-based methods where practical, to advance the touristic thrust of the country and technical enhancement<sup>192</sup> to further the country's growth. Employers and workers' representatives should be closely associated with these initiatives. Further, Curacao, like other SIDS

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<sup>192</sup> These should include training/skills for a sustainability transition, including in environment, energy, transport, water, and construction sectors.

such as Singapore and Costa Rica, in seeking to improve the opportunities for young people to gain access to productive employment and decent work and reduce crime, the Government should increase investment in youth employment, active labour-market support and public-private partnerships, as well as through the creation of enabling environments to facilitate the participation of young people in labour markets, in accordance with international rules and commitments. This also remains critical if Curacao is to fully utilise some of its most important resources, i.e., human capital, while simultaneously reducing poverty and enhancing social inclusion.

The development of socially inclusive programs is likely to have the best development impact and ownership if they emerge from a transparent, participatory, and consultative process. The challenge is to develop social programs, inclusive of those to enhance job creation, reduce poverty, enhance life expectancy, increase access to social services and reduce crime. At the same time these goals need to be sufficiently rigorous to provide a valuable basis for decision making, especially at the national level, and be of use to the national policy community.

### c. External sustainability

In the literature, current account and external debt sustainability are commonly defined as a state wherein an economy is expected to comfortably maintain debt service payments in absence of a drastic correction in its income and expenditure path. Alternatively, the current account is also interpreted as the difference between savings and investment.<sup>193</sup> Hence, a negative turn in the spread implies not only a current account deficit but also a rise in foreign savings (i.e. foreign borrowing). In this way both the current account and external debt are intertwined.

Approaching the question of sustainability from the savings-investment angle, we ask: where does Curacao's current account deficit need to be in order to ensure the stabilization of its debt level? To identify this level we employ a modified version of the equation utilized by the World Bank in Ley (2010). The formula is as follows,

$$ca_t = \left\{ \frac{1 + i_t^f + \alpha^{ext} (1 + i_t)}{(1 + g_t)[1 + \pi_t + \beta^h(1 + \pi_t)]} - 1 \right\} * d_{t-1}$$

wherein the above variables are defined as,

$ca_t$  = current account level in USD

$i_t^f$  = foreign real interest rate, which we proxy using the US real interest rate

$\alpha^{ext}$  = share of external debt in total debt

$i_t$  = average real interest rate

<sup>193</sup> Maurice Obstfeld and Kenneth Rogoff (2004), *Foundations of International Macroeconomics*

$g_t$  = real GDP growth

$\pi_t$  = inflation rate

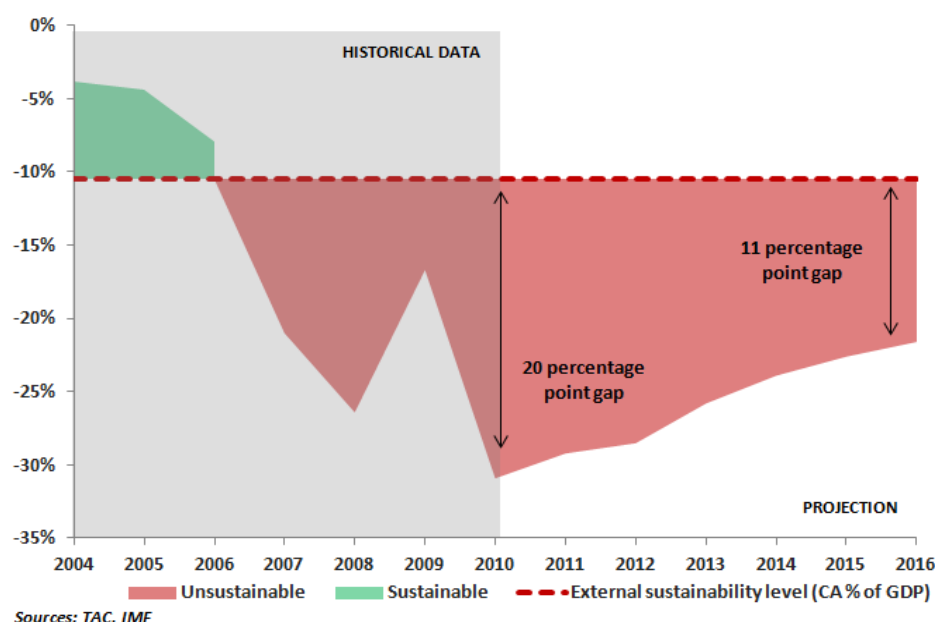
$\beta^h$  = weight of inflation from the nontradable sector

$d_{t-1}$  = external debt level in USD with a one period lag

Using IMF data and projections out to 2016, the above formula gives a threshold value for the current account balance of -11% of GDP to keep the ratio of external debt to GDP constant. Given Curacao's current account deficit (as % of GDP) north of 20%, this confirms that it is presently in unsustainable territory, with potential risks of external debt trap imposing a larger correction in the medium- to long-term. Indeed, to finance the cumulative current account shortfall projected by the IMF up to 2016 would imply a rise in the external debt (as % of GDP) ratio to around 60% (versus 54.6% in 2010 according to the IMF), an increase of more than USD 400mn from the 2010 level.

As shown on the following chart, Curacao's external account performances are expected to improve over the medium term, albeit at insufficient speed. Indeed, the period of sustainability prior to 2007 appears to indicate that the following years were atypical and partly reflective of temporary external shocks, including a shift in global demand conditions and robust gains in commodity prices, pointing to the eventual return to sustainability in line with the recovery in global growth. In the absence of any policy change however, this eventual return is expected only over the medium-long term.

Figure 75 External sustainability assessment

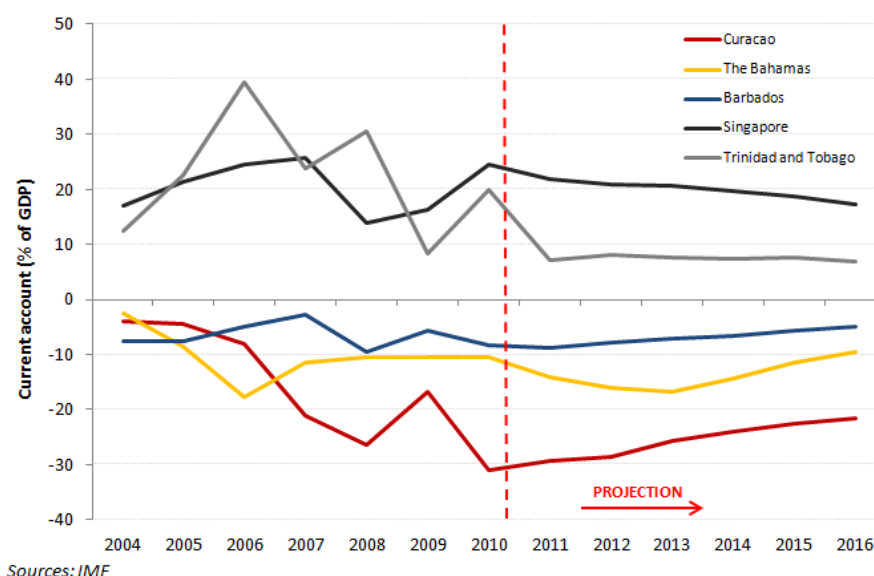


Nonetheless, it is important to note that this level along with the projections should be viewed as general approximations, especially for island economies, as it is quite possible that one large FDI project or a successful trade agreement with a large market can immediately change the current account fortune of these economies while considerably reducing the need for foreign borrowing.

Hence, the first step should be to simply ensure that the current account deficit is reigned in below 20% and then once that is achieved to consider lowering the level towards the average of our benchmark Caribbean islands (excl. Trinidad and Tobago), which incidentally aligns with Curacao's estimated optimal value.

According to IMF data, the island economy is not alone in being above the sustainability cutoff. With a current account (as % of GDP) figure of about -7% and -13%, benchmark neighbours Barbados and the Bahamas are currently above their respective thresholds. The difference, however, is that Barbados is expected to close the current account gap (compared to the debt-stabilizing level) in three years (end-2016) while a gap of 3 percentage points (pps) is expected to persist for the Bahamas. Although Curacao is projected to have a relatively larger gap in 2016, it is expected to show the most improvement over the same time horizon when compared to its benchmark peers, as depicted in the graph below.

Figure 76 Current account deficit (% of GDP), 2004-2016



The IMF real GDP growth and current account projection already take into account a return to potential growth by around 2014/2015, hence the abovementioned trajectory is reflective of what to expect in terms of the current account's improvement in the absence of further exogenous shocks or large policy changes.

In terms of policy direction, the issues are therefore (1) how to engineer a structural improvement in the current account to converge faster with the threshold value, with the lowest cost in terms of domestic economic growth and employment, and (2) how to enhance the country's future resilience to unavoidable exogenous shocks.

- Policies looking at engineering a structural improvement in external performances can be viewed from the export / import side on one hand, on the domestic investment / domestic saving side on the other.



On the external trade side, there are many specific recommendations in this Report for enhancing Curacao's market shares abroad; the macro-view includes options like raising the quality of exports (e.g. raise the value addition in service exports), increasing the volume of exports (e.g. developing the business environment to raise FDI attractiveness or establishing an export promotion institution), and reducing export volatility as much as possible (e.g. provide greater support for the external sector dedicated to services).

Alternatively, the authorities can attempt to improve export sector competitiveness via a 'fiscal devaluation'<sup>194</sup>. This would entail using fiscal policy to mimic the economic consequences of a nominal devaluation in the local currency via a rise in value-added taxes, an increase in import tariffs, while reducing direct taxation (either on income or preferably profit tax) and possibly offering some consumption subsidy to mitigate the cost on the more vulnerable households. As such a fiscal transformation is also warranted by the discussions and analysis on the overall business environment, a detailed analysis and simulation exercise seems clearly warranted.

On the investment / saving side, the macro-diagnosis and projections have highlighted the paradox of a substantial share of GDP in investment associated with a very low economic return on this investment: looked at from the current account balance angle, this would suggest that regulatory and fiscal policies leading to a lower level of aggregate investment with a much higher efficiency: the lower investment spending would result mechanically in a reduction in current account deficit while the increased investment efficiency would compensate the potential loss in economic growth.

From a macro perspective, this would suggest to provide disincentives for low-efficiency investments (real estate, retail sector, some infrastructure) compensated by incentives for high-efficiency investment (health sector, private education sector, R&D / telecommunication sector, some infrastructure / efficiency enhancing investment).

- The range of policies to enhance Curacao's future resilience is narrower. Here again, there are trade diversification strategies (regional partners, larger range of services...) described elsewhere in the Report that can have a significant influence. But three critical macro elements are also important:

The central bank is encouraged to continue its efforts to replenish foreign exchange reserves to generate a sufficient buffer against further external shocks. Given that the island is generally import dependent, it is by necessity export dependent and thus if exports come in weaker than expected, imports are unlikely to ease significantly over the short run, depleting foreign exchange reserves in the process. Hence, an argument can be made that heavy exposure to global demand conditions should naturally demand a higher level of sufficient reserves than the commonly quoted equivalent of 3 months import cover (goods and services). A rough qualitative suggestion would be to aim for 6-to-9 months of imports. As of

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<sup>194</sup> See Farhi et al. (2011)

November 2012, net official reserves at the Central Bank of Curacao and Sint Marteens were at USD 1.45 bn. We estimate that for Curacao only, the reserves would amount to roughly 3 months of imports of goods and services. Assuming that a target of 6-month cover is set for 2016 and using IMF projections for imports, this would translate into a target of USD 1.9 bn, i.e. an increase of USD 450 mn over the current level and almost equivalent to the cumulative increase in external debt because of current account deficits.

Considering the very large need for foreign currency capital inflows, encouraging FDI through the same “measures that would improve the overall business environment” coupled with very low profit tax rates for a given number of years (3 to 5) would also reduce Curacao’s vulnerability to exogenous shock, while providing also the required boost to overall investment efficiency.

It is also very important to keep an easy and open access to international capital markets. Curacao enjoys today a favorable risk rating from Standard & Poor’s (A- for foreign currency rating), with the implicit support of the fiscal side of the agreement with the Netherlands. Foreign currency borrowings by the corporate or domestic banking sector would need however to be monitored so that to ensure that corporate credit risks do not affect over the long-term the sovereign rating.

Provided all else remains constant, the boost to long-run growth from increasing human capital or mimicking the business environment of a benchmark country as described in our alternative macroeconomic scenarios would push forward the date of expected external sustainability. Generally, the implementation of policies to augment the business environment and overall human capital are not presaged to place an undue burden on the current account, rather much of the pressure would be on the fiscal side.

#### ***d. Budget sustainability***

In our aim to assess whether the public debt level is on a sustainable path, which implies no more than ensuring that it does not demonstrate explosive behavior, a common rule of thumb is used. As expounded in an Inter-American Development Bank paper by Alvarado et al. (2004), the following formulation is employed,

$$b = \{r_t - g_t\} * d_t$$

wherein the above variables are defined as,

***b*** = the primary balance (% of GDP)

***r<sub>t</sub>*** = average real interest rate

***g<sub>t</sub>*** = real GDP growth

$d_t$  = public sector debt (% of GDP)

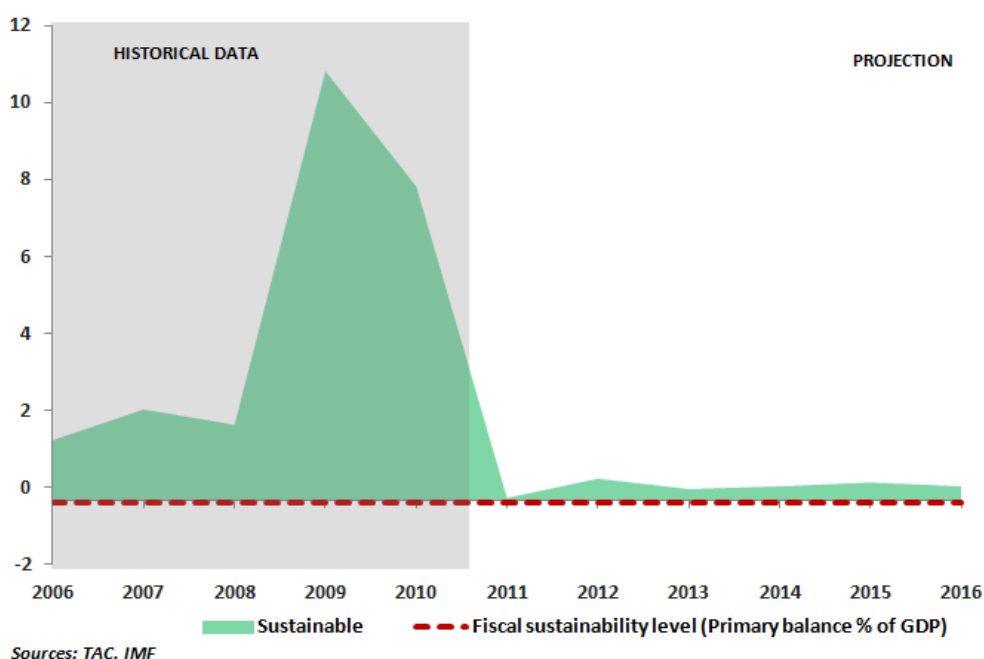
Using IMF data and projections out to 2016, the above equation gave an optimal value for the primary balance (% of GDP) of -0.4%.

When compared to the projected path of the primary balance as foreseen by the IMF (i.e. compliance with the institutional agreement with the Netherlands), two key elements stand out:

- (1) The level of public debt is manageable over the medium term;
- (2) Extra fiscal space for further spending is limited, even when assuming a satisfactory short-term adjustment to the current fiscal difficulties.

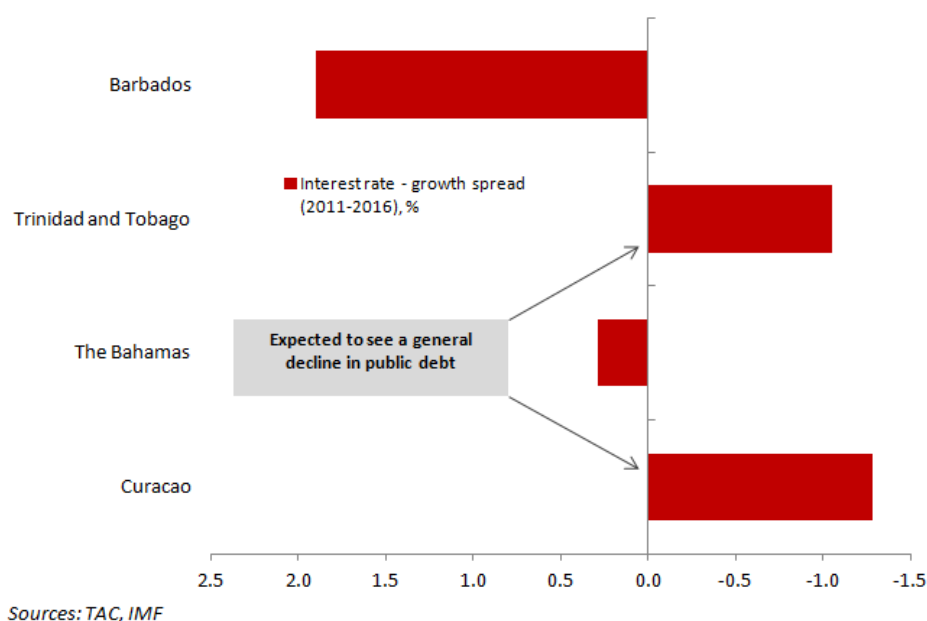
Although the primary balance is projected to generally stabilize over the next few years, the establishment of fiscal rules (e.g. the requirement of a balanced budget and for debt issuances to be limited to capital spending-related expenses) and a steady improvement in global demand conditions should aid the island in weathering fiscal turbulences. Moreover, tax revenue is expected to pick up commensurate with the growth recovery amid declining interest payments. Meanwhile, employee compensation and social benefits spending are likely to remain among the leading expenses weighing on the fiscal budget in coming years.

Figure 77 Fiscal sustainability assessment



Compared to its benchmark peers, on the whole Curacao fares relatively well over the forecast horizon. Based on IMF projections, the graph below illustrates that Curacao and Trinidad and Tobago are expected to see a general decline in their public debt levels through 2016 whereas the other two Caribbean islands are expected to record an advance in debt accumulation, especially Barbados.

Figure 78 Interest rate - growth spread (2011-2016), %



Given that the fiscal sustainability results incorporate a return to trend growth, this indicates that absent any more significant policy reforms over the next few years, i.e. a generally constant primary balance over the forecast time-horizon (2011-2016), the island should remain just above the optimal threshold over the medium term. In other words, its ability to engage in policy reforms that involve raising the aggregate level of public expenditure faster than the GDP growth rate and the related increase in tax revenue will be structurally constrained. The same analysis also points towards risks of unsustainable public finances if the current institutional setting was to be weakened, not even incorporating the likely consequence on access to capital market and interest rate conditions on deficit financing.

In terms of policy options, this would suggest the following comments, on revenues as well as on expenditures:

- On the revenue side, our comments clearly suggest that any fiscal reform must be revenue neutral or preferably modestly positive. As discussed before, we suggest to amplify the fiscal reforms with higher indirect taxes (e.g. VAT increase and modestly higher tariff rates) and lower direct taxes, preferably on corporate so that to enhance expected returns for investors. There should also be attempts at continuing the expansion of the tax base by capturing more of indirect taxes on transactions involving the informal sector. A delicate balance has to be found between the complexity of an “ideal tax regime” (e.g. different VAT rates, with lower rates on activities usually associated with the informal sector) and implementation capabilities as well as transparency and ownership by the various stakeholders. This balance should include timing and sequence issues for any increase in indirect taxation.
- On the spending side, priorities should be geared towards policies that ease the “binding constraints”, i.e. improving the business environment and human capital. Potential policies

that would improve the business environment include lowering administrative barriers (e.g. lower number of days needed to start a business), loosening labor market regulations (e.g. increase labor market efficiency by making it easier to hire and lay-off labor, including foreign labor), and fostering greater predictability and transparency in policymaking (e.g. greater public-private dialogue). These actions can be taken over the immediate-run and stand to provide the largest short term returns with relatively few adverse economic consequences and almost no fiscal implication. This avenue appears to be the most likely option given fiscal constraints.

On the other hand, actions related to augmenting the quantity and quality of human capital would be more expenditure heavy, the fruits of which would likely bear returns over the medium-long term. Given Curacao's fiscal context, the investment-return profile of this type of expenditure is best delayed until after the growth recovery is well underway and tax revenue comfortably replenished.

Finally, our macro observation point towards a couple of simple recommendations on spending, even though most would require further detailed analysis:

- Regarding social benefits, the focus should be on efficiency improvement and better quality of outputs, while reinforcing competition among suppliers and enhancing cost controls; simultaneously, it could be envisaged to move to a “targeted social benefit policy” where publicly-funded benefits and social services would be concentrated on low-income and vulnerable households while the rest of the population would be covered only for the major life accidents.
- Regarding capital and investment spending, private-public partnership should be encouraged including through full-fledge private operations for investments targeting the business / corporate sector (i.e. airports, merchandise ports / logistics, water / sewage for industrial or service zones). Authorities should concentrate on improving the efficiency of existing infrastructure before contemplating large new projects if they are fully funded by the public sector.

#### **e. Competitiveness**

The conventional wisdom is that small island states suffer from significant competitive disadvantages of physical size, limited resource endowment and cost of doing business in such economies. While this may be true of an economy as a whole, there are opportunities that are created for some sectors and firms in those sectors to lead the kind of recovery that Curacao needs. Some authors have shown that successful businesses in SIDS have accessed resources to neutralise the disadvantages of geography in entering international markets, and that the resource-based view (RBV) offers a viable framework within which to locate the sources of their success (Scott et al , 2010). It will therefore be

important to exploit the resources that Curacao have, but with the requisite regulatory framework, to ensure that the benefits of those resources redound to the people of Curacao, while at the same time preserving the Island's environmental capital stock. In this case, the tourism industry remains a vital source to be exploited, but more effective land-use planning, environmental regulations and protection for intellectual property all have to progress in consonance.

### **C. Summary Recommendations to support and stimulate competitiveness and effectiveness in all sectors**

Based on the analysis in the chapters above, we believe the Government of Curacao should focus its attention on the following recommendations, which summarize the key findings of this report and rely on the already positive elements identified. The next chapter will prioritize the recommendations and translate them into effective and operational action plans:

#### ***General Recommendations***

##### ***Environment:***

- Establish a mechanism to record natural assets as part of Curacao's stock of wealth and to measure how quickly they are being lost. The System of Environmental and Economic Accounting developed by the UN Statistical Commission could be used as relevant guidance.
- Establish a mechanism, through the introduction of a tax or otherwise, based on the recorded information, to ensure that polluters pay the full cost for their polluting actions. There could also be incentives provided, in the form of tax waivers, to those companies which do not pollute.
- Enhance the legislative framework to protect the marine resources.
- Develop and enforce an integrated waste management plan.
- Stipulate more energy efficient technical norms for building and increasing water and electricity saving measures.
- Encourage through incentives carbon neutral tourism (implies the offsetting of a destination's carbon footprint by means of processes balancing carbon emissions, such as planting trees or investing in new energy sources).
- Conduct research to ascertain the effects warming temperatures northward may be having on migratory patterns of the fish stock.

- Urgently define a methodology and impose through regulation, the conduct, by the Government, of a simple and swift sustainability impact assessment for each new law, regulation and investment in the country. The methodology should provide for preliminary sustainability impact assessments per type of project, in order to facilitate individual assessments.
- Cooperate with other countries in the region on issues of common interest, such as the protection of the biodiversity and the coral, waste disposal, recycling, etc. At the moment, apart from the existing cooperation agreement between Curaçao, Aruba and Bonaire there is no formal cooperation agreements with the region.
- Retain and grow technical, professional, managerial and academic research expertise and capacity in the areas of environmental sustainability. Generally speaking, enhance research into natural disasters, extreme weather events, climate variability and change, and impact modeling to provide data and support for non-natural scientists engaged in sustainable development and the preparation of adaptation and mitigation strategies.

### **Human resources**

#### **a) Education system**

- Renovate the education system, so as to ensure that
  1. All children are literate and sensitized to culture
  2. All teenagers possess good analytical capacities and professional skills
  3. All teenagers are trained to be diligent
  4. All teenagers are sensitized to business culture and business administration
  5. All teenagers develop strong emotional feelings for the art and culture of their country, the Caribbean and Latin American countries, as part of their heritage.
  6. A variety of professional specialisations (technical, art, intellectual, etc) is offered. There is a need to make the education system more responsive to the needs of the Island.
  7. Drop out rate in schools is minimal,
  8. All teenagers are fully proficient in at least three official languages, i.e., English, Dutch and Spanish, and
  9. Families are sensitized on the importance of education for their children.
- Establish several dialogue Committees
  1. between the education system (politicians, bureaucrats, head masters) and the businesses representatives in Curacao,
  2. between the education system and the parents.
- These Committees should meet on a regular basis and be chaired by professional facilitators

- Provide targeted scholarships (to study in the Region and in the Netherlands) coupled with bonding arrangements as an incentive to channel students into areas/disciplines where the demand for labour is greatest.
  - Pay particular attention to the need to provide adult-learning opportunities in art and business management.
  - Review existing BBA and MBA courses in the country to assess their relevance and quality.
- b) Diaspora
- Establish mechanisms to entice the diaspora to return to Curacao and invest there.
  - This means that paper work and permits should be extremely simple and limited to the minimum necessary to ensure proper registration.
  - Access to property for residents should be simplified and prices controlled.
  - Offer an investment-friendly environment (see below).
- c) Health
- Coordinate the provision of health services under one hospital and its satellites.
  - Encourage investments in private health insurances policies.
  - Define mechanisms to encourage preventive health care. A policy paper on preventive health care has been approved which provides the establishment of a prevention center. It would be important to proceed with implementation.
- d) Housing
- Ensure that the population has access to clean and affordable housing.
  - Facilitate and encourage access to private property. Control prices and speculation on land and liaise with the financial institutions to define adequate and affordable loans for the resident population.
  - Develop a mechanism for the planning of land use for residential and business purposes, which means completing the ongoing review of the National Zoning Plan (EOP).
- e) Pensions
- Proceed with the reform of the pensions' system. In February , 2013 a bill was passed to increase the pension age from 60 years to 65 years This was a positive move.
  - Encourage investments in private pension schemes. Private pension premiums are deductible for taxation. However private pensions are not sufficiently promoted nor by the



private institutions nor by the government. Awareness about the necessity to prepare oneself financially for the retirement must be raised.

f) Crime and security

- Establish a zero tolerance policy against crime, including small offenses.
- Discourage crime by offering good education (see above) and job prospects in a dynamic employment environment (see below).
- Organise additional and well-targeted education facilities for the young offenders.

g) Labour regulations

- Ease labour regulations. Make it simple to recruit and lay off workers (minimum wage and severance pay should be limited for the young workers).
- Eliminate the requirement to obtain the authorization of the Director of Labour Affairs to lay off workers.
- Reassess the 80/20 rule, while provide for a mechanism that would enhance and guarantee a fair employment opportunity for the local workers..
- Strongly reduce social security payments on the unemployed youth or define any socially acceptable mechanism which would render the social security system unattractive for anyone who is able to work.
- Consolidate general support to families and children, in a way that is unrelated to employment.
- Concentrate publicly-funded benefits and social services on low-income and vulnerable households.
- Generally speaking, create dynamic and competitive working conditions, and enhance labour mobility and incentives to upgrade skills and services provided.
- Implement the recommendations in the “Labour Force Development Policy and Structural Proposal for Curacao”.
- Progressively implement the reforms, on the basis of a comprehensive analysis of the social and financial costs and benefits of the proposed measures and in a way that preserves social justice and political stability.

h) General atmosphere

- Progressively instil a culture that is not adverse to risk and that is entrepreneurial.
- Foster a culture of transparency and business openness.

- Discourage emigration through public campaigns.
- Develop societal consensus on the next direction of the economy, which is more liberal and less protected than the previous one.
- Ensure that the regulatory system, albeit simplified is well implemented.
- Develop a culture of implementation of decisions taken and plans defined. For instance implement the SME policy which has already been approved by the government.
- Undertake, upon implementation of the reforms, a major public campaign, through brochures, TV and radio to communicate about the new 'trends' in the country and the new economic development policy. It is important to fight the possible sense of fear within the population against a difficult transition phase and to motivate all to move forward.

### ***Business Environment***

- Reduce the cost of doing business in Curacao
  1. Reduce the cost of capital, which can be ensured by enforcing proper accountancy regulations and creating a positive business environment in general. Plans are already been produced to this effect which would require implementation.
  2. Reduce the prices of electricity, telecommunication and water. An action plan is being established in this regard. Competition policy may help, but also adequate sectoral legislation. There would be a need to proceed with a specialised and detailed critical analysis of existing policies in the area.
  3. Negotiate lower shipping (and container handling) fares (in cooperation with other countries in the region).
- Simplify the Tax System. Move away from direct taxation to more indirect taxation. According to existing studies, budget neutral tax reforms include:
  1. A decrease of the profit-tax rate from 34.5% to 27.5%, which was already achieved. The current intention is to further gradually lower the corporate income tax rate to 15% in the near future.
  2. A decrease in marginal tax rates on income, which was also already achieved,
  3. Furthermore, the turnover tax has been increased from 5% to 6% as per January 2012. Currently the Government passed a bill to introduce turnover tax tariff differentiation (6%, 7%, 9%). The 9% turnover tax is expected to be levied on luxury products while basic necessities (a.o. water, gas, electricity, fruit and vegetables) are expected to be exempted from turnover tax.
  4. Finally the excise duty on gasoline was reduced and the the import duty on low sulphur diesel was abolished.
  5. These reforms should be maintained and consolidated.

- Develop a policy to monitor and improve financial intermediation; establish a trade finance service either through the government or a private-public partnership dedicated to supporting small and medium sized exporters. The Government seems to be already addressing this issue in the context of the new SME policy.
- Simplify the formalities and accelerate the procedure to establish companies, while implementing an efficient and light system to monitor their operations. The government has recently established a permit office for all (economic) permits. Part of this initiative is to introduce a call centre for all (economic) permits. There will be a need to ensure the proper functioning of this office.
- Simplify the formalities and accelerate the procedure to obtain a work permit in order to hire an overseas worker.
- Simplify and accelerate customs clearing procedures.
- Ensure the lack of any abusive practices in licensing and authorization procedures as applied to foreign companies and in procedures for land acquisition.
- Increase the effectiveness of the local judiciary and ensure that commercial disputes and disputes between companies and the State are swiftly settled in an independent way. Organise appropriate training for judges of commercial chambers on business policies and sound practices in market economies. Build on the acquis of the Dutch legal and judiciary system, but progressively abandon resort to the courts of the Netherland which may make the final settlement of a case slower and more expensive.
- Establish a Code on competition and commercial practices. The Team understands that the Council of Ministers approved the draft competition law and passed it on for advice to the Advisory Council and Social Economic Council.
- Establish a well functioning competition authority which will monitor and sanction unfair commercial practices in all sectors. This is provided in the above-mentioned competition law. It is foreseen that the Authority will first supervise sectors where unfair competition is the most critical issue. On the long run the authority will be responsible for supervision in all relevant sectors in the economy. It will be important in this regard to provide effective capacity-building activities to the new competition authority.
- Proceed with investment promotion and build on the ongoing government's initiative to formulate an investment promotion and acquisition policy with accompanying implementation plan. The plan should provide for an enhancement of information dissemination capabilities to provide more quality and consistency in the information provided to investors. It should also provide for the development of training programmes for current and potential investors. It would be important to train them on the international developments and their implications, sector by sector.

- Generally speaking create an environment that is simple, well informed and transparent, but at the same time with good enforcement of the existing rules, in a way that fosters predictability and provides a sense of equity.

### ***Economic policy, trade and investment***

- Encourage domestic investment through the improvement of the business environment (see above).
- Entice the informal sector to register and capture more of indirect taxes on transactions involving the informal sector (applying lower rates). Critically assess to what extent the bill on turnover tax tariff differentiation handles this matter.
- Develop a policy to encourage domestic savings, such as increased taxes on some non-necessity consumption goods, maintaining tax free savings accounts. Improving and widening the use of the pension fund to low risk projects should be explored.
- Pursue an open trade regime that has been formulated on the basis of Curacao's industrial policy objectives. The services sector needs particular focus in identifying those sectors that Curacao could make commitments in.
- Reduce tariffs in intermediary inputs into those service sectors which are targeted for growth. The trade regime needs to be supportive of those services and possible manufacturing sectors where Curacao has a potential to compete. The government already indicated its intention to address these issues in the formulation of the country's foreign economic policy.
- Pursue a negotiation strategy with CARICOM and the WTO with a view to securing improved trade preferences and a more transparent and predictable trade policy environment. The government has already indicated its intention to strengthen and improve Curacao's trade relations with existing partners and to find new ways to participate in trade blocs and / or bilateral agreements, based on the principle of 'open regionalization'. There is a need to address the reasons of the denial of Curacao's observer status in the CARICOM's Council for Trade and Economic Development (COTED).
- The Government has established a High Level Committee (HLC) on WTO Negotiations with the task to make the necessary preparations for the revision of the tariff schedule of the former Netherlands Antilles. It will be important to ensure that the HCL receives all necessary technical assistance.
- Undertake comprehensive budgetary projections. Indeed, the recommended reduction of the tax regimes in place to facilitate business operations will have to be confronted with measures of compensation in order to maintain a safe balance in the social/health budget expenditures. A new balance must be defined in this regard based on growth projections.

**Industrial policy**

- Focus on the services sectors, which generally are less volatile relative to manufactures.
- Specialize in activities that are relatively more human capital-intensive, including higher value-added services and target the general public worldwide.
- Special focus should be on cultural industries, given their strong potential and contribution to Curacao's sustainable development.
- Other sectors, in which investments must be supported and encouraged are
  1. financial services,
  2. tourism,
  3. maritime, airport, transshipment and vessel registration services,
  4. back office services, data centre and digital, IT and high tech services, and
  5. clean energy services
- Maintain and target the existing incentive schemes to ensure they cover the sectors above (systems supporting IT centres, tax incentives on inward capital investment, investment allowances in the form of deductions from taxable profit, expatriate exemptions on income tax, E-Zone company exemptions or reductions in profit and turnover tax rates, duty exemptions, and payment of foreign exchange licence charges, tax holidays and duty exemptions for new industries and hotels and land development companies).
- It will be important to align every incentive scheme within the framework of the sector specific policies. The scheme must be evaluated and if necessary adjusted on the basis of the policy cycle.
- Authorities should concentrate on improving the efficiency of existing infrastructure before contemplating large new projects if they are fully funded by the public sector.
- More incentives should be developed and targeted at SMEs. It is the team's understanding that the Government is already working on this issue. The main tenets of the SME Policy include<sup>195</sup>:
  - The establishment of a Small Business Administration Office which plays the role of a central coordination office to deal with the needs of SME entrepreneurs
  - Reduced bureaucracy and barriers to trade for SMEs (see above)
  - One-on-one coaching and business support services for SME entrepreneurs
  - Easier access to credit for SMEs (see above)
  - An SME Business Incubation Programme

<sup>195</sup> Source: AEF Caribbean, Belaid Midden – en Kleinbedrijf en Entrepreneurship. Ministerie voor Economische Ontwikkeling, March 1, 2012

- A public education and awareness programme to encourage persons to choose entrepreneurship as a career option (see above)
  - Creation of a database on SMEs
  - More explicit inclusion of SMEs in the policy cycle
  - Additional financial resources allocated to SMEs.
- Ensure that incentive and subsidization schemes are a real support to the beneficiary sectors and that they do not create undue distortions to fair competition and trade.
- Establish and promote cooperative companies (cooperatieve vennootschap), especially in the art and cultural sector.
- Offer training to companies on how to run a marketing department and professionally explore niches.
- Encourage the development of brands and geographical indications, in particular the “labelling” of local uniqueness and cultural identity. Liaison should be established in this regard with the project which is currently being executed by the CTB related to branding and labeling of local uniqueness.
- Ensure the presence of a well-organised Export Promotion Agency. This could also serve as a reference centre/ or a service for businessmen on potential trading opportunities to facilitate a better understanding of the multilateral and bilateral trade rules. It is the Teams’ understanding that a new law provides for the incorporation of an export promotion division within the investment promotion agency. This will have to materialize and capacity building efforts should be undertaken for the staff.

### ***Politics and Policy Formulation***

- Ensure political stability.
- Establish a Code of Conduct for politicians.
- Ensure that a consensus is established on certain key directions and regulations.
- Ensure continuity in development plans. Avoid being focused on short term and sector/program- specific result, leaving limited room for an integrated comprehensive approach toward economic development. This may require a formal adoption of this report and its action plans as well as the UNDP Development Plan for Curaçao.
- Foster a more active and effective policy dialogue with the business community, the labour unions and consumers’ associations. . Build on the experience of the ‘Kolaborativo’, which is a tripartite social dialogue platform pursuing national dialogue on a wide range of social

economic issues relevant for the country. 'Kolaborativo' is meant to apply the dialogue strategies as laid out by ILO.

- Establish several dialogue Committees between the Government, the private sector, the consumers' organisations and the labour unions. Committees should be defined according to the topic addressed. Representatives of the relevant stakeholders should be invited to participate to Committee meetings. Participation should be nominative.
- Organize training for the Committees to ensure that the dialogue takes place as much as possible on the basis of objective facts rather than ideology or mere interest.
- Ensure that policy implementation does take place and is not susceptible to being reversed in the next political cycle.
- Ensure that persons at the top of public organizations are not an impediment to reforms. Organise training activities and monitoring systems. Do not hesitate to change the leadership of certain organizations or government bodies and ministries.
- Simplify public administration and ensure that it is directly accountable to the Parliament in terms of effectiveness and efficiency. Define and implement performance indicators.
- Establish an Implementation and Monitoring Mechanism for the reforms to be implemented. This issue is further elaborated in Chapter V below.
- Opportunities should be sought to link aspects of the UNDP Project entitled "*Capacity Development for Nation Building of Curaçao*", with the implementation process of this project, especially as it relates to the participatory dialogue process and preparing a Development Plan. It is the Team's understanding that this report will serve as input for the economic chapter of the UNDP National Development Plan which also includes other aspects of capacity development.
- Anticipate possible difficulties in the transition phase of the economy and prepare to release certain funds in certain sectors and / or groups on a punctual basis. Take advantage of donors' funds and train personnel specialised in donors' working methods and expectations.

### ***Specific sectoral recommendations***

#### ***Tourism***

- Review and then implement the Strategic Tourism Master Plan (STMP) which has been well supported by the stakeholders and is considered to hold the key critical success factors for Curacao, while regulating avoidance of the overcapacity of hotel rooms this plan is said to entail.

- Enhance product development through sustainability practices, quality assurance market intelligence/research and branding strategies. The Curaçao Tourist Board has already started with the process of quality assurance through specific certification/accreditation programs. In 2011 the accreditation programs for the dive operators and apartments were conducted. In 2012, CTB started with the accreditation program for the restaurants. There is a need now to proceed with the accreditation program for tour operators and other tourism related businesses.
- Finalize the brand development program and start the implementation phase.
- Formulate specific project proposals to promote sustainable tourism.

### ***Cultural and creative industries***

- Create a professional art school in Curacao.
- Create a general policy and atmosphere in Curacao promoting art, culture and creation, from primary education to the activities in local communities.
- Create a scheme of support for emerging artists in order to coach them, promote their talent, market it overseas, protect their copyrights and assist them in the management of events/exhibitions/concerts.
- Encourage the creation of cooperative companies in which artistic emulation would take place. Should an artist or a group of artists, whose talent would have been discovered and promoted through the collective effort of the members of the cooperative company become successful, this would also benefit the entire group. The State could also invest in cooperative companies and support them. for instance, Kas di Kultura initiated a project at 'Museo Tula' (Museum) which was funded with SEI funding regarding the development of cooperative craft and agricultural cooperatives at Landhuis Kenepa.
- Organise a public craft market place.
- Develop festivals and events for visitors coming from outside the the Caribbean part of the Dutch Kingdom. Maintain the existing events in Jazz and fashion and link them with touristic promotion. The Team acknowledges that one of CTB's marketing strategies is geared at promoting Curaçao as a magnificent place to hold international conferences, conventions, (musical) events, etc.
- Examine sources of donor funding, including UNESCO.
- Ensure that a sufficiently funded Cultural Agency exists which would be responsible for promoting, supporting, coaching and monitoring the above-mentioned activities.



**Financial services**

- Implement existing legislation so as to facilitate the development of new products.
- Review prudential norms and ensure their consistency with internationally accepted practices (if Curacao is perceived as a stable, well regulated and dynamic financial centre, this would create more incentives to attract international banks and investors).
- Organize a concerted effort of the financial sector in Curacao to develop new products, price them, target the appropriate niches, and conduct the required promotion activities.
- Expand the current number of tax treaties.
- The Team acknowledges that an international financial board, which is a platform of interested stakeholders, exists and that the government intends to render it fully operational. The board would develop new markets and products, guarantee compliance with international standards; promote Curaçao as a reliable financial center; recommend signature of new treaties, etc

**Oil Refinery and Oil by-Products**

- If the decision is taken to upgrade the refinery, major investments are needed. Preparations must begin prior to the contract expiration.
- Install the multidisciplinary working group provided in the Action Plan related to the Isla refinery.
- Encourage investments in the production of oil bi-products (such as petrochemicals, gasoline, lubricants and paints, etc) for which sales are booming internationally.

**Maritime, Airport, Transshipment and Vessel Registration**

- Encourage investment in new equipment in the harbor and seek a strategic partner. There is a need to develop the harbor infrastructure, building new terminals which will allow bigger vessels to dock and transfer cargo more quickly and more efficiently.
- Maintain the vision of Curacao as a strategic hub.
- Simplify regulations and accelerate bureaucratic inspections for the shipping industry, while ensuring full application of the law. Implement existing plans. Define light, but effective systems to monitor the smuggling of narcotics in transshipment operations originating from Latin America. Train officials. Take into account the research produced in the context of the country's identification of its harbour policy.
- Transshipment facilities should include e-clearing functions and certification facilities.
- Facilitate the registration of ships and the establishment of shipping companies.

- Reduce costs (and price) of handling and harbor services in general.

***Logistical services related to high value products***

- Increase and train the staff of the Curacao Airport Holdings.
- Facilitate investment related to the importation of technology (see above).

***Clean Energy Sectors***

- Develop a coherent energy policy in the clean energy sector.
- Facilitate investments in waste management and renewable energies. Implement a specialised agency in Curacao to promote clean energies and identify potential investors.
- Review the electricity supply contracts that guarantee the power providers a minimum rate of return on their investments (fuel surcharge).

***Role of the private sector***

Even though it is not this study's purpose to dictate to companies the measures they should take to adjust to changes, it is important to highlight the need for them to organise themselves, think about their competitiveness, invest and explore new markets. In particular

- Companies should make an effort to improve the quality and presentation of local products (including food)
- They should invent or determine products or services which could benefit from geographical indications and file demands for protection in this regard.
- They should develop their competitiveness and compare themselves to companies in other countries in similar situations (benchmarking).
- They should use their available liquidities to make the necessary investments for the competitiveness
- They should proactively look for niche markets
- Finally, they should maintain close dialogue with the government and help it to carry out the relevant tasks that accompany the reform.

In certain areas and sectors (such as the cultural sector), certain companies, given their small size or their rather artisanal working methods, could consider strategic alliances or collective management of

their activities, under the control and protection of sectoral regulatory agencies, promotion agencies and a general competition authority.

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**CHAPTER V.****ACTION PLANS**

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**A. Sequencing and prioritisation of actions**

Chapter IV highlighted key recommendations to achieve structural long-term sustainable development. This chapter proposes their sequencing and prioritization so as to produce in the shorter term “low hanging fruits” that would encourage the pursuit of reforms and the development of a national consensus around them.

**1. Short-term measures**

It is suggested that in the first year of the reform package, most attention is focused on the improvement of the business climate and the initial reforms of the educational system. Indeed, both elements were identified as potentially generating the highest returns for economic growth and diversification. It would also be very important to establish the required mechanisms which would enable the government to proceed with a periodic sustainability impact assessment of the reforms undertaken. Other priority areas and rather straightforward “low hanging fruits” would be the development of programmes enticing the diaspora to return and invest in Curacao, as well as, generally speaking, any programme aimed at facilitating and fostering private sector investments.

Clearly, achieving structural reforms such as those needed in Curacao requires the initiation of several processes in different policy areas at the same time. Pure sequential action, per topic addressed will not be effective. Therefore managing Curacao's transition from a dependent economy to a resilient one requires both strong managerial and political capacities. They entail coordination of several institutions, administrative departments, research institutes, political parties, trade unions, the press and civil society. While diversity in Curacao's society may not be a contributing factor, its small size somehow compensates and facilitates communication. Chapter 3 below will address some of the institutional aspects that must be addressed to accompany the entire process.

The actions to be undertaken in the short-term can be summarized in the table below. The indicators of achievement proposed are indicative only and intended to facilitate the monitoring of implementation. This should take place in the context of the monitoring mechanism proposed in chapter C below. The indicators are themselves subject to constant review and refinement in light of the implementation experience.

Policy field	Issue to be addressed	Action	Indicators of achievement
<b>Environmental protection</b>	Sustainability impact assessments	Urgently define a methodology and impose through regulation, the conduct, by the Government, of a simple and swift sustainability impact assessment for each new law, regulation and investment in the country. The methodology should provide for preliminary sustainability impact assessments per type of project, in order to facilitate individual assessments.	<ul style="list-style-type: none"> <li>- Methodology identified</li> <li>- Regulation adopted</li> </ul>
	Develop professional and research capacities in environmental policies.	Retain and grow technical, professional, managerial and academic research expertise and capacity in the areas of environmental sustainability. Generally speaking, enhance research into natural disasters, extreme weather events, climate variability and change, and impact modeling to provide data and support for non-natural scientists engaged in sustainable development and the preparation of adaptation and mitigation strategies.	<ul style="list-style-type: none"> <li>- At least two academics specialised in the areas of environmental sustainability are operational in the country</li> <li>- Two key publications per year</li> </ul>
<b>Human resources</b>			
- <b>Education system</b>	<p>Renovation of the educational system :</p> <ol style="list-style-type: none"> <li>1. Culture</li> <li>2. analytical capacities and professional skills</li> <li>3. diligence</li> <li>4. business culture and business administration</li> <li>5. patriotism</li> <li>6. Offer of a variety of professional specialisations</li> <li>7. Minimal drop out rate</li> <li>8. fully proficient in three</li> </ol>	<p>Initiate a comprehensive policy to renovate the education system, so as to ensure that</p> <ol style="list-style-type: none"> <li>1. All children are literate and sensitized to culture</li> <li>2. All teenagers possess good analytical capacities and professional skills</li> <li>3. All teenagers are trained to be diligent</li> <li>4. All teenagers are sensitized to business culture and business administration</li> <li>5. All teenagers develop strong emotional feelings for the art and culture of their country, the Caribbean and Latin American countries, as part of their heritage.</li> <li>6. A variety of professional specialisations (technical, art, intellectual, etc) is offered. There is a need to make the education system more responsive to the needs of the Island.</li> <li>7. Drop out rate in schools is minimal,</li> </ol>	<ul style="list-style-type: none"> <li>- comprehensive policy to renovate the education system identified and adopted</li> </ul>

Policy field	Issue to be addressed	Action	Indicators of achievement
	official languages	8. All teenagers are fully proficient in at least three official languages, i.e., English, Dutch and Spanish, and  9. Families are sensitized on the importance of education for their children.	
	Dialogue between the education system and the parents and the businesses representatives	Establish several dialogue Committees  1. between the education system (politicians, bureaucrats, head masters) and the businesses representatives in Curacao,  2. between the education system and the parents.  These Committees should meet on a regular basis and be chaired by professional facilitators	<ul style="list-style-type: none"> <li>- Dialogues committees established.</li> <li>- Chairs appointed</li> <li>- Two meetings organized (as evidenced by minutes)</li> </ul>
	Scholarships	Provide three targeted scholarships per year (to study in the Region and in the Netherlands) coupled with bonding arrangements as an incentive to channel students into areas/disciplines where the demand for labour is greatest.	<ul style="list-style-type: none"> <li>- Three scholarships provided</li> </ul>
	Adult-learning opportunities	<ul style="list-style-type: none"> <li>- Pay particular attention to the need to provide adult-learning opportunities in art and business management</li> <li>- Review existing BBA and MBA courses in the country to assess their relevance and quality.</li> </ul>	<ul style="list-style-type: none"> <li>- existing BBA and MBA courses reviewed and improved</li> <li>- Two new adult-learning programmes identified and approved</li> </ul>
- <b>Diaspora</b>	Simplification of paper works and permits	Simplify as much as possible paper work and permits to entice the diaspora to return to Curacao and invest there.	<ul style="list-style-type: none"> <li>- Reduced number of paper work and permits</li> <li>- Return of diaspora citizens observed</li> </ul>
- <b>Housing</b>	Prices and speculation on land.  Loans	Facilitate and encourage access to private property for residents. Control prices and speculation on land and liaise with the financial institutions to define adequate and affordable loans for the resident population.	<ul style="list-style-type: none"> <li>- Increased number of property owners among residents with different incomes</li> <li>- Number of loans for the purchase of property has increased by 20%</li> </ul>
	Planning of land use	Develop a mechanism for the planning of land use for residential and business purposes, which means completing the ongoing review of the National Zoning Plan (EOP).	<ul style="list-style-type: none"> <li>- ongoing review of the National Zoning Plan (EOP) is completed</li> </ul>
- <b>Crime and security</b>	Crime reduction	Establish a zero tolerance policy against crime, including small offenses.	<ul style="list-style-type: none"> <li>- Number of criminal acts is reduced by 50%</li> </ul>

Policy field	Issue to be addressed	Action	Indicators of achievement
		Organise additional and well-targeted education facilities for the young offenders.	- Educational programmes for the young offenders established
- <b>Labour regulations</b>	Flexibility of labour	Ease labour regulations. Make it simple to recruit and lay off workers (minimum wage and severance pay should be limited for the young workers).	- Labour regulations eased. - Number of dismissals increased - Dismissals are compensated by new recruitments
		Eliminate the requirement to obtain the authorization of the Director of Labour Affairs to lay off workers.	- Legislation to eliminate the requirement is adopted
		Reassess the 80/20 rule, while provide for a mechanism that would enhance and guarantee a fair employment opportunity for the local workers	- The 80/20 rule is re-assessed and adapted so as to avoid undermining certain critical sectors, while providing fair employment opportunities for the local workers - Lack of complaints regarding the new rule.
- <b>General atmosphere</b>	Entrepreneurial culture, and country credibility	- Convey a culture that is not adverse to risk and that is entrepreneurial. - Convey and apply a culture of transparency and business openness. - Convey and apply a culture of implementation of decisions taken and plans defined - Start a campaign to discourage emigration	- Number of speeches and publications - General atmosphere and work attitude in the country improve - More residents take action to create a company.
		Ensure that the regulatory system, albeit simplified is well implemented. Establish a monitoring mechanism (see below)	- All existing plans and regulations are implemented.
	Public campaign	Undertake, upon initiation of a comprehensive plan of reforms, a major public campaign, through brochures, TV and radio to communicate about the new 'trends' in the country and the new economic development policy. It is important to fight the possible sense of fear within the population against a difficult transition phase and to motivate all to move forward.	- Public campaign organized and implemented
<b>Business Environment</b>	Cost of doing business	Reduce the cost of doing business in Curacao 1. Reduce the cost of capital, which	- Cost of capital is reduced and existing plans to this effect

Policy field	Issue to be addressed	Action	Indicators of achievement
		<p>can be ensured by enforcing proper accountancy regulations and creating a positive business environment in general. Implement plans which are already produced to this effect.</p> <p>2. Reduce the prices of electricity, telecommunication and water. Competition policy may help, but also adequate sectoral legislation. Proceed with a specialised and detailed critical analysis of existing policies in the area.</p> <p>3. Negotiate lower shipping (and container handling) fares (in cooperation with other countries in the region).</p>	<p>implemented</p> <ul style="list-style-type: none"> <li>- Prices of electricity, telecommunication and water are reduced</li> <li>- Action to negotiate reduced shipping (and container handling) fares is initiated</li> </ul>
	Tax reform	Simplify the Tax System and maintain and consolidate existing reforms (decrease of the profit-tax rate, decrease in marginal tax rates on income, increase in the turnover tax, decrease in the excise duty on gasoline and low sulphur diesel.	<ul style="list-style-type: none"> <li>- Tax System simplified</li> </ul>
	Financial intermediation	<ul style="list-style-type: none"> <li>- Develop a policy to monitor and improve financial intermediation;</li> <li>- establish a trade finance service either through the government or a private-public partnership dedicated to supporting small and medium sized exporters. The Government seems to be already addressing this issue in the context of the new SME policy.</li> </ul>	<ul style="list-style-type: none"> <li>- policy to monitor and improve financial intermediation is developed and approved</li> <li>- a trade finance service dedicated to supporting small and medium sized exporters is established</li> </ul>
	Simplification of formalities	<ul style="list-style-type: none"> <li>- Ensure the proper functioning of the recently established permit office for all (economic) permits</li> <li>- Simplify the formalities and accelerate the procedure to obtain a work permit in order to hire an overseas worker.</li> <li>- Simplify and accelerate customs clearing procedures</li> <li>- Ensure the lack of any abusive practices in licensing and authorization procedures as applied to foreign companies and in procedures for land acquisition.</li> </ul>	<ul style="list-style-type: none"> <li>- permit office for all (economic) permits functions smoothly</li> <li>- formalities and the procedure to obtain a work permit in order to hire an overseas worker are simplified</li> <li>- licensing and authorization procedures are straightforward</li> <li>- Absence of complaints with respect to any of the above procedures</li> </ul>
	Judiciary system	<ul style="list-style-type: none"> <li>- Increase the effectiveness of the local judiciary and ensure that commercial disputes and</li> </ul>	<ul style="list-style-type: none"> <li>- A reform to streamline and accelerate judicial procedures is initiated</li> </ul>



Policy field	Issue to be addressed	Action	Indicators of achievement
		<p>disputes between companies and the State are swiftly settled in an independent way.</p> <ul style="list-style-type: none"> <li>- Organise appropriate training for judges of commercial chambers on business policies and sound practices in market economies.</li> <li>- Build on the acquis of the Dutch legal and judiciary system, but progressively abandon resort to the courts of the Netherlands which may make the final settlement of a case slower and more expensive.</li> </ul>	<ul style="list-style-type: none"> <li>- Trainings for judges organized</li> <li>- Reduced number of complaints regarding the Judiciary system</li> <li>- Independent assessments confirms the success of the reform</li> </ul>
	Competition policy	<ul style="list-style-type: none"> <li>- Implement the new Code on competition and commercial practices.</li> <li>- Establish and build capacity of a well functioning competition authority which will monitor and sanction unfair commercial practices in all sectors.</li> </ul>	<ul style="list-style-type: none"> <li>- new Code on competition and commercial practices is approved and enters into force</li> <li>- First cases successfully handled</li> </ul>
	Investment promotion	<p>Proceed with investment promotion and build on the ongoing government's initiative to formulate an investment promotion and acquisition policy with accompanying implementation plan. The plan should provide for an enhancement of information dissemination capabilities to provide more quality and consistency in the information provided to investors. It should also provide for the development of training programmes for current and potential investors. It would be important to train them on the international developments and their implications, sector by sector</p>	<ul style="list-style-type: none"> <li>- investment promotion and acquisition policy and accompanying implementation plan are adopted and implemented</li> </ul>
<b>Trade policy</b>	Trade regime	<p>Pursue an open trade regime that has been formulated on the basis of Curacao's industrial policy objectives. The services sector needs particular focus in identifying those sectors that Curacao could make commitments in.</p>	<ul style="list-style-type: none"> <li>- Optimal trade regime identified for all critical sectors</li> </ul>
		<p>Reduce tariffs in intermediary inputs into those service sectors which are targeted for growth. The trade regime needs to be supportive of those services and possible manufacturing sectors where Curacao has a potential to compete. The government already indicated its intention to address these</p>	<ul style="list-style-type: none"> <li>- idem</li> </ul>

Policy field	Issue to be addressed	Action	Indicators of achievement
		issues in the formulation of the country's foreign economic policy.	
	Trade negotiations and regional integration	Pursue a negotiation strategy with CARICOM and the WTO with a view to securing improved trade preferences and a more transparent and predictable trade policy environment. The government has already indicated its intention to strengthen and improve Curacao's trade relations with existing partners and to find new ways to participate in trade blocs and / or bilateral agreements, based on the principle of 'open regionalization'. There is a need to address the reasons of Curacao's observer status in the CARICOM's Council for Trade and Economic Development (COTED)	<ul style="list-style-type: none"> <li>- New tariff schedule is negotiated at the WTO pursuant to Article XXVIII of the GATT</li> <li>- Deeper relationship is established with CARICOM and LAC</li> </ul>
		Provide technical assistance to the High Level Committee (HLC) on WTO Negotiations	<ul style="list-style-type: none"> <li>- Training and capacity-building activities are organized for the High Level Committee (HLC)</li> </ul>
<b>Budget</b>	Projections	Undertake comprehensive budgetary projections. Indeed, the recommended reduction of the tax regimes in place to facilitate business operations will have to be confronted with measures of compensation in order to maintain a safe balance in the social/health budget expenditures. A new balance must be defined in this regard based on growth projections.	<ul style="list-style-type: none"> <li>- Budgetary projections carried out.</li> </ul>
<b>Industrial policy</b>	Services sectors	Provide clear direction: <ul style="list-style-type: none"> <li>- Focus on the services sectors, which generally are less volatile relative to manufactures.</li> <li>- Specialize in activities that are relatively more human capital-intensive, including higher value-added services and target the general public worldwide.</li> <li>- Special focus should be on cultural industries, given their strong potential and contribution to Curacao's sustainable development</li> <li>- Other key sectors, in which investments must be supported and encouraged are               <ol style="list-style-type: none"> <li>1. financial services,</li> <li>2. tourism,</li> </ol> </li> </ul>	<ul style="list-style-type: none"> <li>- A comprehensive industrial policy document is produced, approved and published.</li> </ul>

Policy field	Issue to be addressed	Action	Indicators of achievement
		3. maritime, airport, transshipment and vessel registration services, 4. back office services, data centre and digital, IT and high tech services, and 5. clean energy services	
	Incentive schemes	Maintain and target the existing incentive schemes to ensure they cover the sectors above (systems supporting IT centres, tax incentives on inward capital investment, investment allowances in the form of deductions from taxable profit, expatriate exemptions on income tax, E-Zone company exemptions or reductions in profit and turnover tax rates, duty exemptions, and payment of foreign exchange licence charges, tax holidays and duty exemptions for new industries and hotels and land development companies). It will be important to align every incentive scheme within the framework of the sector specific policies. The scheme must be evaluated and if necessary adjusted on the basis of the policy cycle.	<ul style="list-style-type: none"> <li>- Optimal incentives schemes for SME identified in each sector</li> <li>- Incentives schemes for SMEs available</li> <li>- Increase in the number of SMEs benefitting for the incentive schemes</li> </ul>
		More incentives should be developed and targeted at SMEs. It is the team's understanding that the Government is already working on this issue.	- Idem
		Ensure that incentive and subsidization schemes are a real support to the beneficiary sectors and that they do not create undue distortions to fair competition and trade.	- Idem
	Cooperative companies	Establish and promote cooperative companies (cooperatieve vennootschap), especially in the art and cultural sector.	- Number of cooperative companies increased
	Training	Offer training to companies on how to run a marketing department and professionally explore niches.	- At least ten training courses provided throughout the country and the communities
<b>Politics and Policy Formulation</b>	Political Code of conduct	Establish a Code of Conduct for politicians	- Code of Conduct identified and approved
	Continuity	Ensure continuity in development plans. Avoid being focused on short term and sector/program- specific	- Development plan formally approved and adopted

Policy field	Issue to be addressed	Action	Indicators of achievement
		result, leaving limited room for an integrated comprehensive approach toward economic development. This may require a formal adoption of this report and its action plans as well as the UNDP Development plan for Curaçao.	
	Policy dialogue	<p>Foster a more active and effective policy dialogue with the business community, the labour unions and consumers' associations. Review the experience of the 'Kolaborativo', which is a tripartite social dialogue platform pursuing national dialogue on a wide range of social economic issues relevant for the country.</p> <p>Establish several dialogue Committees between the Government, the private sector, the consumers' organisations and the labour unions. Committees should be defined according to the topic addressed. Representatives of the relevant stakeholders should be invited to participate to Committee meetings. Participation should be nominative.</p>	<ul style="list-style-type: none"> <li>- experience of the 'Kolaborativo' reviewed</li> <li>- A new dialogue mechanism is established</li> <li>- Relevant Committees are established and chairs appointed</li> <li>- At least two meetings of each Committee organized, as evidenced by minutes</li> </ul>
		Organize training for the Committees to ensure that the dialogue takes place as much as possible on the basis of objective facts rather than ideology or mere interest.	<ul style="list-style-type: none"> <li>- Capacity building activities for the members of the Committee are organised</li> </ul>
	Policy implementation	Ensure that policy implementation does take place and is not susceptible to being reversed in the next political cycle.	<ul style="list-style-type: none"> <li>- Development programme is implemented and maintained with the new government</li> </ul>
		Ensure that persons at the top of public organizations are not an impediment to reforms. Organise training activities and monitoring systems. Do not hesitate to change the leadership of certain organizations or government bodies and ministries.	<ul style="list-style-type: none"> <li>- Top level public administrators cooperate in the implementation of the development plan</li> </ul>
		Establish an Implementation and Monitoring Mechanism for the reforms to be implemented.	<ul style="list-style-type: none"> <li>- Implementation and Monitoring Mechanism is established</li> </ul>
	Policy coherence	Opportunities should be sought to link aspects of the UNDP Project entitled "Capacity Development for Nation Building of Curaçao", with the implementation process of this project, especially as it relates to the participatory dialogue process and preparing a Development Plan.	<ul style="list-style-type: none"> <li>- UNDP Report is inspired by the adopted development plan.</li> </ul>

Policy field	Issue to be addressed	Action	Indicators of achievement
	Anticipation of difficulties	Anticipate possible difficulties in the transition phase of the economy and prepare to release certain funds in certain sectors and / or groups on a punctual basis. Take advantage of donors' funds and train personnel specialized in donors' working methods and expectations.	- Funds are made available to sustain limited difficulties due to transition phases
<b>Tourism</b>	Brand development program	Finalize the brand development program and start the implementation phase	- brand development program is finalized, adopted and implemented.
<b>Cultural and creative industries</b>	Art promotion	Create a general policy and atmosphere in Curacao promoting art, culture and creation, from primary education to the activities in local communities.	- Policy and action plan adopted and communicated by public speeches and publications.
	Festivals and events	Maintain the existing events in Jazz and fashion and link them with touristic promotion	- existing events in Jazz and fashion maintained.
<b>Financial services</b>	Legislation	Implement existing legislation so as to facilitate the development of new products.	- Existing legislation in the financial sector is implemented
		Review prudential norms and ensure their consistency with internationally accepted practices.	- Prudential norms are reviewed, improved and implemented.
	New products	Organize a concerted effort of the financial sector in Curacao to develop new products, price them, target the appropriate niches, and conduct the required promotion activities	- New Financial products created
<b>Oil Refinery and Oil by-Products</b>	New investments	If the decision is taken to upgrade the refinery, major investments are needed. Preparations must begin prior to the contract expiration.  Install the multidisciplinary working group provided in the Action Plan related to the Isla refinery.	- Plan regarding the future of the Isla refinery finalized and implementation initiated
		Encourage investments in the production of oil bi-products (such as petrochemicals, gasoline, lubricants and paints, etc) for which sales are booming internationally.	- New investments in the production of oil bi-products
<b>Maritime, Airport, Transshipment and Vessel Registration</b>	Simplification of regulation	Simplify regulations and accelerate bureaucratic inspections for the shipping industry, while ensuring full application of the law. Implement existing plans. Define light, but effective systems to monitor the smuggling of narcotics in transshipment operations originating	- regulations and bureaucratic inspections for the shipping industry are simplified and accelerated - Light, but effective systems to monitor the smuggling of narcotics in transshipment

Policy field	Issue to be addressed	Action	Indicators of achievement
		from Latin America. Train officials.	operations originating from Latin America are identified and implemented - Number of training activities for law compliance officials
	Registration of ships	Facilitate the registration of ships and the establishment of shipping companies.	- Increase in the number of registered ships and shipping companies
	Harbour services	Reduce costs (and price) of handling and harbor services in general.	- Price of handling and harbor services decreases
<b>Clean Energy Sectors</b>	Energy policy	Develop a coherent energy policy in the clean energy sector.	- A coherent energy policy in the clean energy sector is developed, adopted and implementation is initiated
	Electricity supply contracts	Review the electricity supply contracts that guarantee the power providers a minimum rate of return on their investments (fuel surcharge).	- Electricity supply contracts reviewed and amended, as the case may be.

## 2. Medium to long term measures

In the medium to longer term, all the remaining measures which were identified in Chapter 4, but not covered by the short-term action plan, should be implemented. They can be summarized in the table below.

Policy field	Issue to be addressed	Action	Indicators of achievement
<b>Environmental protection</b>	Record and accounting of natural assets	Establish a mechanism to record natural assets as part of Curacao's stock of wealth and to measure how quickly they are being lost. The System of Environmental and Economic Accounting developed by the UN Statistical Commission could be used as relevant guidance	- Mechanism established
	Polluter-pays principle	Establish a mechanism, through the introduction of a tax or otherwise, based on the recorded information, to ensure that polluters pay the full cost for their polluting actions. There could also be incentives provided, in the	- Mechanism established

Policy field	Issue to be addressed	Action	Indicators of achievement
		form of tax waivers, to those companies which do not pollute	
	Marine resources	Enhance the legislative framework to protect the marine resources.	- New legislation to protect the marine resources is prepared and adopted
	Waste Plan	Develop and enforce an integrated waste management plan	- An integrated waste management plan is developed and enforced
	Water and electricity saving measures	Stipulate more energy efficient technical norms for building and increasing water and electricity saving measures.	- More energy efficient technical norms for building and increasing water and electricity saving measures are identified and enforced
	Green Tourism	Encourage through incentives carbon neutral tourism (implies the offsetting of a destination's carbon footprint by means of processes balancing carbon emissions, such as planting trees or investing in new energy sources)	- Incentives for investment in carbon-neutral tourism are identified and made available
	Effects of warming temperatures on fish stock	Conduct research to ascertain the effects warming temperatures northward may be having on migratory patterns of the fish stock.	- Research is carried out, as evidenced by publications
	Regional cooperation on issues of common interest	Cooperate with other countries in the region on issues of common interest, such as the protection of the biodiversity and the coral, waste disposal, recycling, etc.	- Additional treaties and joint programmes are adopted
<b>Human resources</b>			
- <b>Education system</b>	Renovation of the educational system	Pursue the comprehensive policy to renovate the education system initiated in the short term	- Increased adequacy of young students with labour demand
	Dialogue between the education system and the parents and the businesses representatives	Dialogue Committees keep functioning	- Two meetings organized per year (as evidenced by minutes)
	Scholarships	Provide three targeted scholarships per year (to study in the Region and in the Netherlands) coupled with bonding arrangements as an incentive to channel students into areas/disciplines where the demand for labour is greatest.	- Three scholarships provided
	Adult-learning opportunities	Provide adult-learning opportunities in art and business management	- Number of adults enrolled in adult-learning programmes
- <b>Diaspora</b>	Diaspora's return and investments	Establish mechanisms to entice the diaspora to return to Curacao and	- Returns of diaspora observed



Policy field	Issue to be addressed	Action	Indicators of achievement
		invest there.	
- <b>Health</b>	Consolidation of health services	Coordinate the provision of health services under one hospital and its satellites.	- Provision of health services is coordinated under one hospital and its satellites
	Private health insurance policies	Encourage investments in private health insurances policies.	- Increase in the number of private health insurance contracts
	Preventive health care	Define mechanisms to encourage preventive health care. A policy paper on preventive health care has been approved which provides the establishment of a prevention center. It would be important to proceed with implementation	- Prevention center established and running
- <b>Housing</b>	Clean and affordable housing	Ensure that the population has access to clean and affordable housing.	- No longer homeless residents or residents leaving in unhealthy houses
	Prices and speculation on land. Loans	Facilitate and encourage access to private property for residents. Control prices and speculation on land and liaise with the financial institutions to define adequate and affordable loans for the resident population.	- Increased number of property owners with different incomes. - Number of loans for the purchase of property has increased by 20% every year.
- <b>Pensions</b>		- Awareness about the necessity to prepare oneself financially for the retirement must be raised - assess the possibilities to introduce a compulsory supplementary pension for all employees and free pension schemes .	- Number of speeches and press articles related to private pension schemes. - Identify adequate measures to entice recourse to private pension schemes.
- <b>Crime and security</b>	Crime reduction	Maintain a zero tolerance policy against crime, including small offenses.	- Number of criminal acts is reduced by 20% every year
		Organise additional and well-targeted education facilities for the young offenders.	- Number of young offenders enrolled in educational programmes
- <b>Labour regulations</b>	Social security payments	Strongly reduce social security payments on the unemployed youth or define any socially acceptable mechanism which would render the social security system unattractive for anyone who is able to work.	- No young worker refusing a job without justification.
	Support families to	Consolidate general support to families and children, in a way that is unrelated to employment.	- Families with children have guaranteed minimum income to enable them to raise their children.



Policy field	Issue to be addressed	Action	Indicators of achievement
		Concentrate publicly-funded benefits and social services on low-income and vulnerable households	- All citizens benefit from minimum income and health.
	Competitive working conditions	Generally speaking, create dynamic and competitive working conditions, and enhance labour mobility and incentives to upgrade skills and services provided.	- Increase in the number of employed persons.
		Implement the recommendations in the "Labour Force Development Policy and Structural Proposal for Curacao".	- Recommendations in the "Labour Force Development Policy and Structural Proposal for Curacao" implemented.
		Progressively implement the reforms, on the basis of a comprehensive analysis of the social and financial costs and benefits of the proposed measures and in a way that preserves social justice and political stability.	- Methodology for social impact assessments identified and systematically applied for all reform proposals
- <b>General atmosphere</b>	Entrepreneurial culture, and country credibility	<ul style="list-style-type: none"> <li>- Maintain a culture that is not adverse to risk and that is entrepreneurial.</li> <li>- Maintain a culture of transparency and business openness.</li> <li>- Maintain a culture of implementation of decisions taken and plans defined</li> </ul>	<ul style="list-style-type: none"> <li>- Number of speeches and publications</li> <li>- General atmosphere and work attitude in the country improve</li> <li>- More residents take initiative to create a company.</li> </ul>
		Ensure that the regulatory system, albeit simplified is well implemented.	- All existing plans and regulations are implemented.
<b>Business Environment</b>	Cost of doing business	Negotiate lower shipping (and container handling) fares (in cooperation with other countries in the region).	- Reduced shipping (and container handling) fares is negotiated
	Simplification of formalities	<ul style="list-style-type: none"> <li>- Ensure the proper functioning of the recently established permit office for all (economic) permits</li> <li>- Ensure the lack of any abusive practices in licensing and authorization procedures as applied to foreign companies and in procedures for land acquisition.</li> </ul>	<ul style="list-style-type: none"> <li>- permit office for all (economic) permits functions smoothly</li> <li>- licensing and authorization procedures are straightforward</li> <li>- Absence of complaints with respect to any of the above procedures</li> </ul>
	Judiciary system	<ul style="list-style-type: none"> <li>- Increase the effectiveness of the local judiciary and ensure that commercial disputes and disputes between companies and the State are swiftly settled in an independent way.</li> <li>- Build on the acquis of the Dutch legal and judiciary system, but</li> </ul>	<ul style="list-style-type: none"> <li>- A reform to streamline and accelerate judicial procedures is completed</li> <li>- Reduced number of complaints regarding the Judiciary System</li> </ul>

Policy field	Issue to be addressed	Action	Indicators of achievement
		progressively abandon resort to the courts of the Netherlands which may make the final settlement of a case slower and more expensive.	- Independent assessments confirm the success of the reform
	Competition policy	<ul style="list-style-type: none"> <li>- Implement the new Code on competition and commercial practices.</li> <li>- Ensure the effective functioning of a competition authority which will monitor and sanction unfair commercial practices in all sectors.</li> </ul>	- Number of cases successfully handled
	Investment promotion	Proceed with investment promotion	- Number of companies created
<b>Trade policy</b>	Trade negotiations and regional integration	Pursue a negotiation strategy with CARICOM and the WTO with a view to securing improved trade preferences and a more transparent and predictable trade policy environment.	- Deeper relationship is established with CARICOM and LAC
<b>Fiscal policy</b>	Informal sector	Entice the informal sector to register and capture more of indirect taxes on transactions involving the informal sector (applying lower rates).	- Increase in the number of economic operators which are registered
	Encourage savings	Develop a policy to encourage domestic savings, such as increased taxes on some non-necessity consumption goods, maintaining tax free savings accounts. Improving and widening the use of the pension fund to low risk projects should be explored.	- A policy to encourage domestic savings is developed and implemented
<b>Budget</b>	Projections	Undertake comprehensive budgetary projections	- Budgetary projections carried out.
<b>Industrial policy</b>	Incentive schemes	Maintain effective and sound incentive schemes in all critical sectors. Ensure that incentive and subsidization schemes are a real support to the beneficiary sectors and that they do not create undue distortions to fair competition and trade.	<ul style="list-style-type: none"> <li>- Incentives schemes for SMEs available</li> <li>- Increase in the number of SMEs benefitting for the incentive schemes</li> </ul>
	Brands and geographical indications	Encourage the development of brands and geographical indications, in particular the “labelling” of local uniqueness and cultural identity.	- Increase in the number of domestic brands and geographical indications
	Export promotion	Ensure the presence of a well-organised Export Promotion Agency. This could also serve as a reference centre/ or a service for businessmen on potential trading opportunities to facilitate a better understanding of the multilateral and bilateral trade rules. It is the Teams’ understanding that a new law provides for the incorporation of an export promotion division within	<ul style="list-style-type: none"> <li>- Export Promotion Agency or division are established and running.</li> <li>- Staff has the required capacities.</li> </ul>

Policy field	Issue to be addressed	Action	Indicators of achievement
		the investment promotion agency. This will have to materialize and capacity building efforts should be undertaken for the staff	
	Cooperative companies	Establish and promote cooperative companies (cooperatieve vennootschap), especially in the art and cultural sector.	- Number of cooperative companies increased
	Training	Offer training to companies on how to run a marketing department and professionally explore niches.	- At least ten training courses per year provided throughout the country and the communities
<b>Politics and Policy Formulation</b>	Political Code of conduct	Apply Code of Conduct for politicians i	- Code of Conduct is maintained
	Continuity	Ensure continuity in development plans.	- Progress in the implementation of development plan, as evidenced by independent reviews
	Policy dialogue	Foster a more active and effective policy dialogue with the business community, the labour unions and consumers' associations.	- At least two meetings of each Committee organized per year, as evidenced by minutes
		Organize training for the Committees to ensure that the dialogue takes place as much as possible on the basis of objective facts rather than ideology or mere interest.	- Capacity building activities for the members of the Committee are organised
	Policy implementation	Ensure that policy implementation does take place and is not susceptible to being reversed in the next political cycle.	- Development programme is implemented and maintained with all new governments
		Ensure that persons at the top of public organizations are not an impediment to reforms. Organise training activities and monitoring systems. Do not hesitate to change the leadership of certain organizations or government bodies and ministries.	- Top level public administrators cooperate in the implementation of the development plan
		Maintain an Implementation and Monitoring Mechanism for the reforms to be implemented.	- Implementation and Monitoring Mechanism is running and produces one report per year
	Public administration reform	Simplify public administration and ensure that it is directly accountable to the Parliament in terms of effectiveness and efficiency.	- Public administration reform is initiated. - Performance indicators are identified and implemented
	Anticipation of difficulties	Anticipate possible difficulties in the transition phase of the economy and	- Funds are made available to sustain

Policy field	Issue to be addressed	Action	Indicators of achievement
		prepare to release certain funds in certain sectors and / or groups on a punctual basis. Take advantage of donors' funds and train personnel specialized in donors' working methods and expectations.	limited difficulties due to transition phases
<b>Tourism</b>	Brand development program	Finalize the brand development program and start the implementation phase	- brand development program is finalized, adopted and implemented.
	Strategic Tourism Master Plan (STMP)	Review and then implement the Strategic Tourism Master Plan (STMP) which has been well supported by the stakeholders and is considered to hold the key critical success factors for Curacao, while regulating avoidance of the overcapacity of hotel rooms this plan is said to entail.	- Strategic Tourism Master Plan is reviewed, improved and implemented
	Product development	Enhance product development through sustainability practices, quality assurance market intelligence/research and branding strategies. The Curaçao Tourist Board has already started with the process of quality assurance through specific certification/accreditation programs. In 2011 the accreditation programs for the dive operators and apartments were conducted. In 2012, CTB started with the accreditation program for the restaurants. There is a need now to proceed with the accreditation program for tour operators and other tourism related businesses	- New products developed. - Accreditation programme for tour operators and other tourism related businesses is established and running
		Formulate specific project proposals to promote sustainable tourism	- project proposals are formulated
<b>Cultural and creative industries</b>	Art promotion	Create a general policy and atmosphere in Curacao promoting art, culture and creation, from primary education to the activities in local communities.	- Policy and action plan adopted and communicated by public speeches and publications.
	Festivals and events	Maintain the existing events in Jazz and fashion and link them with touristic promotion.  Develop other festivals and events for visitors coming from outside the Caribbean part of the Dutch Kingdom.	- existing events in Jazz and fashion maintained. - New festival and events organised.
	Art school and art promotion	Create a professional art school in Curacao.	- A professional art school is created in Curacao and students enroll.
		Create a scheme of support for emerging artists in order to coach	- A scheme of support is made available for

Policy field	Issue to be addressed	Action	Indicators of achievement
		them, promote their talent, market it overseas, protect their copyrights and assist them in the management of events/exhibitions/concerts.	emerging artists
		Encourage the creation of cooperative companies in which artistic emulation would take place. Should an artist or a group of artists, whose talent would have been discovered and promoted through the collective effort of the members of the cooperative company become successful, this would also benefit the entire group. The State could also invest in cooperative companies and support them.	- Cooperative companies are established develop profitable business
	Public craft market place	Organise a public craft market place.	- a public craft market place is organised
	Funding	Examine sources of donor funding, including UNESCO.	- Additional funding for cultural policies is available
	Cultural Agency	Ensure that a sufficiently funded Cultural Agency exists which would be responsible for promoting, supporting, coaching and monitoring the above-mentioned activities.	- An effective Cultural Agency exists and is adequately funded
<b>Financial services</b>	Legislation	Implement existing legislation so as to facilitate the development of new products.	- Existing legislation in the financial sector is implemented
		Review prudential norms and ensure their consistency with internationally accepted practices.	- Prudential norms are reviewed, improved and implemented.
	New products	Organize a concerted effort of the financial sector in Curacao to develop new products, price them, target the appropriate niches, and conduct the required promotion activities.	- New Financial products created
	International financial board	The Team acknowledges that an international financial board, which is a platform of interested stakeholders, exists and that the government intends to render it fully operational. The board would develop new markets and products, guarantee compliance with international standards; promote Curaçao as a reliable financial center; recommend signature of new treaties, etc	- international financial board made operational - Number of proposals issued by the international financial board
	Tax treaties	Expand the current number of tax treaties.	- Additional tax treaties are signed and in force
<b>Oil Refinery and Oil by-Products</b>	New investments	If the decision is taken to upgrade the refinery, major investments are needed. Preparations must begin prior	- Plan regarding the future of the Isla refinery finalized and

Policy field	Issue to be addressed	Action	Indicators of achievement
		to the contract expiration. Install the multidisciplinary working group provided in the Action Plan related to the Isla refinery.	implementation initiated
		Encourage investments in the production of oil bi-products (such as petrochemicals, gasoline, lubricants and paints, etc) for which sales are booming internationally.	- New investments in the production of oil bi-products
<b>Maritime, Airport, Transshipment and Vessel Registration</b>	Simplification of regulation	Simplify regulations and accelerate bureaucratic inspections for the shipping industry, while ensuring full application of the law. Implement existing plans. Define light, but effective systems to monitor the smuggling of narcotics in transshipment operations originating from Latin America. Train officials.	- regulations and bureaucratic inspections for the shipping industry are simplified and accelerated - light, but effective systems to monitor the smuggling of narcotics in transshipment operations originating from Latin America are identified and implemented - Number of training activities for law compliance officials
	Registration of ships	Facilitate the registration of ships and the establishment of shipping companies.	- Increase in the number of registered ships and shipping companies
	Harbour services	Reduce costs (and price) of handling and harbor services in general.	- Price of handling and harbor services decreases
	New investments	Encourage investment in new equipment in the harbor and seek a strategic partner. There is a need to develop the harbor infrastructure, building new terminals which will allow bigger vessels to dock and transfer cargo more quickly and more efficiently.	- There is a new private investment in equipment and infrastructure in the harbor
<b>Logistical services related to high value products</b>	Training	Increase and train the staff of the Curacao Airport Holdings	- The staff of the Curacao Airport Holdings is increased and better prepared to handle its tasks.
<b>Clean Energy Sectors</b>	Energy policy	Develop a coherent energy policy in the clean energy sector.	- A coherent energy policy in the clean energy sector is developed, adopted and implementation is initiated
	Electricity supply contracts	Review the electricity supply contracts that guarantee the power providers a minimum rate of return on their	- Electricity supply contracts reviewed and amended, as the case

Policy field	Issue to be addressed	Action	Indicators of achievement
		investments (fuel surcharge).	may be.
	Waste management and renewable energies	Facilitate investments in waste management and renewable energies. Implement a specialised agency in Curacao to promote clean energies and identify potential investors.	<ul style="list-style-type: none"> <li>- There are a new private investments in waste management and renewable energies</li> <li>- A specialised agency is established and running.</li> </ul>

## B. The actions to be taken at the different levels

### 1. By the Government of Curacao

The Government of Curacao should carry out all the measures indicated in the Actions plans above and manage all the concomitant policy reforms in a pragmatic and systematic way. Public administration's proactive and tireless cooperation is essential for the preparation of the relevant policy documents and legislative drafts. Parliament and political parties should also exercise responsibility and address draft bills and policies in a cooperative way, taking into account the general interest and adopting a constructive approach.

In particular, it will also be important for the public authorities to associate in their work the representatives of businesses and civil society and ensure the smooth and professional functioning of the consultative Committees the establishment of which is recommended in the Action Plan. In a transition phase, processes and attitudes are as important as the content and the quality of the substantive reforms.

### 2. By the enterprises

As indicated in the last section of Chapter 4, Curacao's enterprises and investors are expected to "play the game". They must acknowledge the transition phase and prepare themselves to adjust to changes. They will also have to think about their competitiveness, invest and explore new markets.

In addition to this job, they would also be expected to cooperate with the government in the building up of the reforms. They should organise themselves through adequate representation and participate in the policy debates and the works of the relevant consultative Committees in a proactive and constructive way. At times, it would be a good idea if certain key enterprises in key sectors were taking the lead and encourage the pursuit of reforms.



Participating in a collective policy-making effort requires substantial understanding of public affairs, patience, openness and tolerance for diverging views. These qualities should be built within enterprises and conveyed by their management.

### **3. By the Civil society**

Civil society encompasses a very large array of stakeholders, from political parties and labour Unions, to churches and universities, research centres and press. Each has its role to play and may either contribute to the reforms and their acceptability in society or instead seek to undermine them. While it will be important not to ignore these important players in the policy-making processes, they themselves should proactively participate in a constructive way. They should professionally seek to understand the real meaning and intent of the reform beyond their mere symbolic aspects and elevate the debate in society rather than contribute to its division.

## **C. Establishment of a Monitoring Management System for Implementation**

Curacao is engaged in a process of economic reforms and integration into the global economy. It intends to orient its trade and economic policy towards competitiveness, production intensification, diversification, value addition and exploitation of exports opportunities.

Managing such transition is not easy task. There are several challenges and opportunities which must be addressed effectively and efficiently. In this context, it is important to propose a management tool to assist the Government of Curacao in ensuring the implementation and the monitoring of such transition, with the view to ensure its expected benefits in the Curacao context.

### **1. Objectives of an implementation mechanism**

The main objective of an effective implementation monitoring mechanism (IMM) would be to keep the reforms focused on their ultimate development objectives and to positively contribute to the diversification of the economy, and its sustainable growth.

The IMM would monitor progress of the ongoing reform process in Curacao. It would highlight the status of implementation of the development plan and identify difficulties and constraints that may arise in this regard. It would also enable the identification of remedies in case the development objectives are not met and steer the reforms in the direction of the identified bottlenecks.



The monitoring mechanism would thus be a policy tool that would be used in a way that goes beyond the strict legal implementation of the laws, regulations and decisions that are decided in a development plan. It would concern cross-cutting issues spanning through the entire array of domestic and international policies of Curacao. It would provide an effective monitoring of the effects of the reforms and an independent analysis to the decision-makers, including recommendations. The decision-makers in the country will then take their decisions, by accepting or rejecting the recommendations.

## **2. Scope of an implementation mechanism (what to monitor)**

A first key aspect the IMM would have to monitor is the legal implementation of all laws, regulations and decisions which are decided in the development plan.

A second key aspect the IMM would have to monitor is the impact of the reforms on Curacao's economy. Indeed, should the effect of the reforms not be in line with Curacao's expectations regarding economic development, adequate action must be devised. The mechanism should monitor all usual macro-economic and trade performance indicators, which can provide very useful information on the status of Curacao's economy and its current and potential growth. It should also provide a regular assessment of the market structure for key products and services and assess changes in global demand and in global market shares, as well as price trends in key markets. This would enable the anticipation of possible benefits or difficulties in particular sectors and trigger requested changes. The mechanism should also analyse trade flows and keep assessing the impact of the tariff structure provided in the agreements to which Curacao is or will become a party. The IMM should also keep track of movement of capital and financial flows in Curacao and assess the impact on its economy of the reforms in the financial sector. The mechanism should also monitor foreign direct investment flows and the patterns thereof with the view to encourage those that are sustainable in the country in the long-term.

A third key aspect the mechanism would have to monitor is the impact of the reforms on social behaviour and in particular on the poor and vulnerable groups. The reforms and integration of Curacao in global and regional supply chains may entail losses in some of the less competitive sectors. Identification of these sectors, and the population that would be affected, would enable to identify adequate adjustment policies and manage a transition period. Furthermore, an assessment of the reforms' sustainability in relation to the use of natural resources and overall environmental protection is also essential. The mechanism should be able to propose solutions regarding any difficulty arising in this respect.

Furthermore, the mechanism would assess whether the pace of reforms in Curacao is in line with the natural development of the economy and the competitive pressure caused by Curacao's trade partners. It would recommend in this regard actions to enable the country to reap benefits of

integration and their inclusion into the national development policies. It would also highlight the administrative and supply-side constraints which would hamper the capacity of economic operators to take advantage of the new economic environment. This analysis would seriously contribute to the constant re-definition of the most adequate sequencing of reforms according to the most pressing priorities.

The mechanism would also monitor ongoing FTA negotiations and the likely economic, social and environmental impact of future FTAs of Curacao with a view to improve Curacao's negotiating positions.

Finally the mechanism would monitor the relevance and impact of ongoing technical assistance on the implementation of the reforms and their expected benefits. This could contribute to an increase of available technical assistance and steer it to address the identified bottlenecks in administration and policies.

### **3. Methodological issues (how to monitor)**

Assuming a decision to establish an implementation mechanism is taken and its scope is defined, it is important to start proceeding with its actual realization. This requires thinking in very concrete terms. How will the indicators be assessed? Which data should be gathered, how and by whom? Who will carry out the analysis and take responsibility for the final recommendations? What could be the exact outcome of the process and how will it be fed into policies and negotiating processes?

Many trade and economic indicators identified in this report section are measured by quantitative assessments. There are several techniques used in this regard and economists have identified specific indexes and formulae. This work however requires data that is accurate and relevant. It is therefore essential for the functioning of the mechanism to rely on an effective data collection mechanism. It would also be important to organise the proper transmission and formatting of the data in a readable format, for its immediate use by the analysts.

Furthermore, many of the matters included in the scope of the implementation mechanism require a qualitative analysis. First legal analysis is required to assess the consistency of Curacao's new domestic laws and regulations with the overall legal environment and with Curacao's international agreements. Second, it would also be important to carry out a careful and professional analysis of the sustainability of the reforms. Third, an independent auditing of the business environment and administrative procedures in all sectors of governmental action should be carried out. This analysis would require consultations with all interested stakeholders and carefully devised questionnaires addressed to them. This requires input from the private sector.

In the implementation of the mechanism, it is also necessary to determine who should be responsible for it and carry out the monitoring and the analysis. In this respect, while there are of course as many possible options as there are countries, a strong recommendation would be to ensure that command

of the mechanism is centralized in one institution. It is also strongly recommended to grant it official status. Considering the mechanism addresses cross-cutting issues, the institution appointed should be capable of having a birds' eye view of all Curacao's policies and realities as well as a strong coordinating capacity that goes beyond the capabilities of single ministries. Furthermore, while one official institution would take final responsibility for the mechanism, it would be essential to ensure it does not work in isolation from the key stakeholders. Full participation and responsibility in the functioning of the mechanism would be required of all relevant ministries and public institutions that already play a direct role in the implementation of the reforms. The private sector, as a directly concerned stakeholder, should also participate. Universities and professional research centres could also contribute their skills and experience in data collection and analysis. Consultations should also be carried out with all groups of society: consumers, workers, women, inhabitants of city and communities. A clear indicator of the mechanism's performance would be the extent to which it is connected with the Curacao's realities and it is capable to address the concerns of its entire population and of its enterprises.

Furthermore, it will be important to feed the recommendations into the country's relevant decision-making processes. It is recommended that in order for the mechanism to remain as neutral and objective as possible, recommendations remain subject to final decision-making of the political authorities. It is indeed necessary to make a clear distinction between technical recommendations and final decisions, and to enable the political authorities to take ultimate responsibility of the course of action pursued. It would also be important to clearly identify all the decision-makers which would benefit from the outcome of the mechanism and adequately communicate with them.

Finally, extensive use of information technology should be made in the various components of the mechanism. However, given the number of qualitative assessments to be carried out and the important human factor that will affect the mechanism's functioning, in particular the inter-departmental cooperation and the public-private dialogue, the overall management of the mechanisms will have to be controlled by individuals, taking responsibility for it.

#### **4. The prerequisites that are needed to ensure the success of the Implementation Mechanism in Curacao's context**

In summary, several features should be met as a prerequisite in order to ensure the proper functioning of an effective implementation monitoring mechanism in Curacao: the command of the mechanism should be centralized in one institution; an official Decree, Order or any other binding domestic regulation should grant official status to the mechanism; given the diversity of the issues to be addressed, which span across the competences of several Ministries, the mechanism should be positioned in an institution which has the capacity to coordinate the input of the different ministries and government agencies; the mechanism should be independent from any single ministerial influence or any vested interest; the mechanism should directly report to the highest levels of the Government, i.e.

the Prime Minister; the Management of the mechanism should be strong, sufficiently prestigious in the country to ensure authority. The mechanism should be granted with the institutional power to collect data and information from all Ministries and government agencies; the mechanism should be supported by a solid administration and research staff having adequate qualifications and motivation; the mechanism should be granted with the budget and the capacity to order studies and analysis to existing universities and research centres; working methods, including participation of relevant stakeholders and their responsibilities in the functioning of the mechanism, should be defined in a clear and binding document; the mechanism should ensure that the views of all economic operators, including SMEs, and new entrants in the market are sufficiently heard and taken into account; the mechanism must produce analysis that is consistent, rigorous, exhaustive, objective and neutral; the mechanism's recommendations should not have a binding nature, in order to ensure their continuous objectivity and neutrality and the mechanism's analysis must be delivered regularly and on-time.

## **5. Establishment of an implementation mechanisms in Curacao**

Having defined the conditions for a successful implementation of the mechanism, it would be important to base any future work on the realities of the Curacao's public administration and decision-making processes. It would also be important for the Curacao Government to use and organise all existing tools, including technical assistance, in an effective and efficient way. The overall idea is not to create a mechanism from nothing, but to build on the current capacities and address the weaknesses that can be observed in this regard.

On a very preliminary basis, it would appear that many management functions relating to reforms are already fulfilled in Curacao, even if not necessarily in the optimal way. However, key methodological constraints can be identified and improvements suggested. In particular, coordinating responsibility in Curacao in relation to economic development is somehow unclear and characterized by many overlaps and insufficient communication. It is also difficult to identify the precise responsibilities of all Ministries in charge of key aspects of economic policies. Research is scattered, uncoordinated and insufficient. Existing institutions, do not have the capacity or resources to carry out optimal monitoring work.

It is therefore recommended to establish in Curacao a new office which would manage the Implementation Monitoring Mechanism (IMM), as described above. Given the prerequisites and the assessment of Curacao's current decision-making and coordination mechanisms, it appears obvious that the Office should directly respond to the Prime Minister. Only the latter has the necessary capacity to take the required initiatives and to coordinate with authority the input of the different ministries and government agencies. The need for effective coordination, in line with the general interest and according to the highest quality standards should not be underestimated. This is critical for the Office's overall success. The Office would provide independent data, analysis and recommendations directly to

the Prime Minister. No Government entity would be authorized to instruct the Office about the information to be provided to the Prime Minister.

Three phases for the progressive establishment of the Office are proposed. During a first phase, activities would generate ownership and drive for an implementation mechanism. They will focus around the organisation of an initiating workshop that would confirm interest in the implementation mechanism and adequately organise the work for its progressive operationalisation. During this phase, the Office would be formally established in the country's administrative structure and relevant technical assistance would be organised to accompany the process. The second phase would lay down the technical grounds for the practical functioning of the mechanism and the carrying out of a first comprehensive monitoring. The third phase would be the consolidation of the IMM's acquis. This phase will keep working on addressing the shortcomings identified in the functioning of the mechanism after the first monitoring exercise. It will produce a second comprehensive monitoring. The benefits of the mechanism should be gradually felt by the stakeholders and decision-makers as it produces relevant analysis and recommendations that would enable them to improve their policies and capacity to take advantage of international integration.

#### **D. Consensus building on core areas and an inner circle of policy issues shaping the national political identity**

In order to succeed in the reforms process, as indicated above, stakeholders should constructively participate in it and contribute their best input, irrespective of the political parties in Government. Furthermore, plans of economic and social reforms such as those proposed in this report span across several years and thus may have to be managed by different governments. Continuity in the bulk of the reform process is necessary for benefits to be reaped soon from it.

Hence it is necessary to build national consensus on the path of reforms, at least some of its core aspects, which include:

- Agreement on the diagnostic of the country's situation;
- Acknowledgment that reforms are necessary;
- Agreement on the need to pursue the goal of sustainable development, as identified in its three legs: economic growth, environmental and social sustainability;
- Agreement that the reform of the educational system is a key component of any successful reform, as well as on the objectives of the educational system;
- Agreement on the need to proactively pay attention to develop work and business opportunities for the youth;
- Recognition of the important role of enterprises and investments for economic development;

- Agreement on the need to offer a suitable business environment to facilitate investments, including in particular those of the diaspora;
- Agreement on the need to combat crime, offer affordable housing to all and combat all forms of poverty;
- Agreement to ease labour regulations and generally speaking to create dynamic and competitive working conditions, and enhance labour mobility and incentives to upgrade skills and services provided;
- Agreement on the need to progressively instill a culture that is not adverse to risk and that is entrepreneurial;
- Agreement on the need to reduce the cost of doing business in Curacao, to simplify the tax system and the formalities and procedures to establish companies, to simplify the formalities and accelerate the procedure to obtain a work permit in order to hire an overseas worker and to simplify and accelerate customs procedures,
- Agreement on the need to simplify public administration and ensure that it is directly accountable to the Parliament in terms of effectiveness and efficiency.
- Recognition that an effective competition policy can contribute to economic growth;
- Recognition that an industrial policy based on the promotion of key services sectors can be very effective and that investing in cultural industries may produce many benefits and positive spillover effects;
- Recognition that the pursuit of an open trade regime and a negotiation strategy with CARICOM and the WTO with a view to securing improved trade preferences and a more transparent and predictable trade policy environment could be very beneficial;
- Acceptance of the fact that the economy will become more liberal and less protected than the previous one, while it is expected to provide jobs and good living conditions to all;
- Agreement on the need to ensure that the regulatory system, albeit simplified is well implemented and to develop expectations that decisions taken and plans defined are implemented;
- Agreement on the need to improve the functioning and independence of the Judiciary system;
- Agreement on the desirability to establish a Code of Conduct for politicians;
- Overall agreement on the need to ensure continuity in the implementation of development plans and support an implementation monitoring mechanism.
- Agreement on the need to adopt cooperative approaches and constructive attitudes in policy formulation.

- Understanding that the credit of the success of the reforms will not be attributed to the running government only, but to the entire society.

#### **E. Recommendations for additional Technical Assistance activities, if required, and use of available EDF and other donors' funds**

We are convinced that engaging into the reforms and monitoring them will need substantial capacity building at all levels of the administration, but also in the business community. Activities should concern all aspects of the reforms' policy. It is not possible in the context of this study to carry out a complete needs assessment in this respect. This should probably be one of the first TA activities to carry out. We may only stress some of the most important issues that would need to be tackled and for which TA could be very useful.

Be this as it may, we believe that TA activities alone will not make a difference. Only a comprehensive institutional strengthening could lead to the expected developments. The suggestions below only provide useful *examples* of possible support but they are not the *actual* stand alone support which will entail changes. Instead - streamlining industrial policy, creating an institutional framework which coordinates with all stakeholders to deal with trade, improving statistics, building dialogue, investing in education and research, etc is what is required first. In this light, one can only emphasize the need for a political commitment from the Government of Curacao to engage in economic reforms and proactively manage the transition phase.

We believe that some key TA activities should be implemented with priority

- Capacity-building for sustainability impact assessments
- Professional advisory services for the educational reform
- Professional advisory services for the development of a competition policy
- A comprehensive institutional report for the establishment of the IMM
- Professional communications services to promote the reforms within the country
- Capacity building for dialogue and consultative Committees
- Sectoral capacity-building.

#### **F. Indications of required budget and expenditures.**

This chapter provides indications of required budget and expenditures.

[to be completed]

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CONCLUDING REMARKS

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[to be completed]



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## ANNEXES.

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### A. Growth Diagnostic: Methodology

In principle, an economy that is underperforming is one that is likely saddled with market imperfections and distortions. These distortions come in many guises and can either stem from government policies (e.g. taxes on production) or inherent market dynamics (e.g. risk misalignment). In turn, they impede the transition of resources into areas where they can be optimized and thereby function as a stalwart headwind against attaining an economy's unique productivity frontier. The growth diagnostic approach of Hausmann, Rodrik and Velasco (2005) takes this into consideration and develops a method to isolate the most binding constraints to economic activity and thereby the set of policies that are likely to provide the largest return. Developed by some of the most prominent scholars and researchers in Economic Development, the HRV diagnostic has been applied to Bolivia, Belize, Brazil, El Salvador, and the Dominican Republic by notable development institutions like the World Bank, Asia Development Bank (ADB), and the Inter-American Development Bank (IADB). Given that the entire list of required reforms is unknowable or impractical and that second-best interactions across markets is difficult to pinpoint with certainty, the approach focuses on reforms where the direct effects can be expected to be relatively large.

In terms of application, rather than concentrating on specific distortions the diagnostic begins by evaluating the proximate determinants of economic growth (capital, investment, savings, productivity, etc...). Thereafter, through a process of elimination identify economic distortions that offer the largest return from reform. Grounded in standard growth theory, the authors employ a Ramsey-type optimal growth model with the balanced growth equilibrium condition being:

$$\frac{\dot{k}_t}{k_t} = \frac{\dot{c}_t}{c_t} = \sigma[r(1 - \tau) - \rho],$$

where  $\frac{\dot{c}_t}{c_t}$  and  $\frac{\dot{k}_t}{k_t}$  denote the rate of change over time of consumption and capital. The variables are defined as follows:

c = consumption

k = capital

r = the rate of return on capital

$\tau$  = the tax rate on capital, actual or expected, formal or informal

$\rho$  = the real interest rate

$\sigma$  = intertemporal elasticity of consumption

In addition, the private return on capital  $r$  is endogenously determined by:

$$r = r(a, \theta, x),$$

where,

$a$  = indicator of total factor productivity

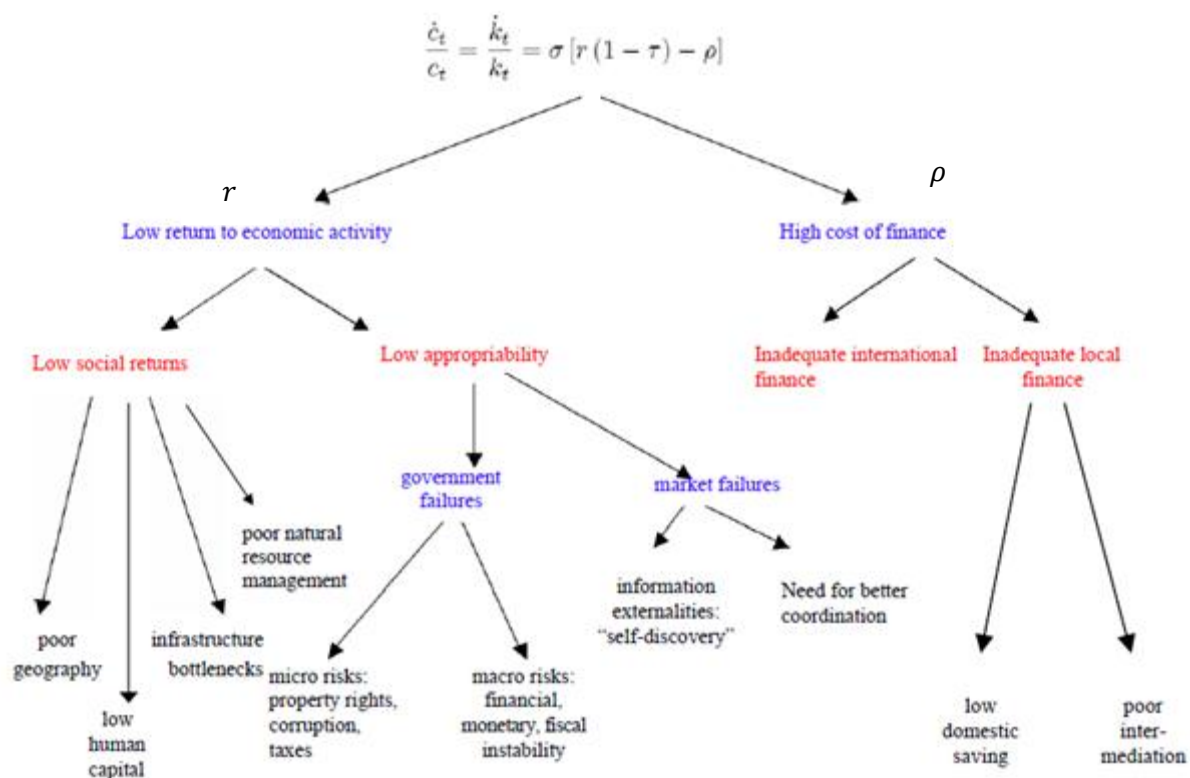
$x$  = availability of complementary factors of production, such as infrastructure or human capital

$\theta$  = index of externality (a higher  $\theta$  means a larger distortion)

Equation (1) is also called the “Euler equation” or “Keynes-Ramsey rule” and is the critical platform wherefrom the diagnostic begins to assess constraints, as it captures much of the short- and long-run variables that underlie economic activity. If the real interest rate ( $\rho$ ) is high, investment is low and the economy is liquidity constrained. Conversely, if the return on capital ( $r$ ) is low, investment also tends to be low and the economy is considered inefficient.

There are several reasons for why rates would react in this fashion. If a country has high financing costs ( $\rho$ ), this could either be due limited/no access to international capital markets or issues associated with the domestic financial market. For the former, potential explanations could be that perceived country risk is too high, the business environment is poor and unattractive to FDI, the debt level is unsustainable and a risk to macro conditions, excessive capital account restrictions, etc. For the latter, problems may arise due to inadequate domestic savings or poor financial intermediation.

The sources of low rates of return ( $r$ ), given by  $r(1-\tau)$ , are relatively more diverse. We can have a high  $\tau$ , which can include high taxes, an inefficient tax system, poor property rights, corruption, and/or macro instability. Alternatively, low returns can be due to a high  $\theta$ , which can include market failures such as coordination externalities, or a low  $x$ , which can involve insufficient investment in complementary factors of production such as human capital and infrastructure. Or lastly, it can stem from low productivity ( $a$ ).



Source: Hausmann et al. (2005)

According to Hausmann et al. (2005), economic growth essentially depends on the returns to accumulation (broadly construed), their private appropriability<sup>196</sup>, and on the cost of financing. All of these factors impair investment and by extension the accumulation of capital over time. In effect, the negative impact limits any growth advance towards or an expansion of the potential rate. Hence, we first ask if investment is low. Next, the diagnostic analysis seeks to isolate which of the three aforementioned factors pose the greatest impediment to higher growth. And thereafter, uncover the specific distortions within the selected factor. It is important to keep in mind that when constraints are “binding” alternative measures are designed to circumvent these obstacles (Rodrik 2004a and 2004b). Hence, these causes (constraints) spawn symptoms (e.g. a large informal market, poor legal institutions, poor financial intermediation, etc...). Progressing down the diagnostic tree (see illustration above) is equivalent to removing candidates for the most binding constraint on growth. The ultimate lesson to be derived from this theoretical analysis is that it is this constraint, once identified, that warrants the most attention from policymakers.

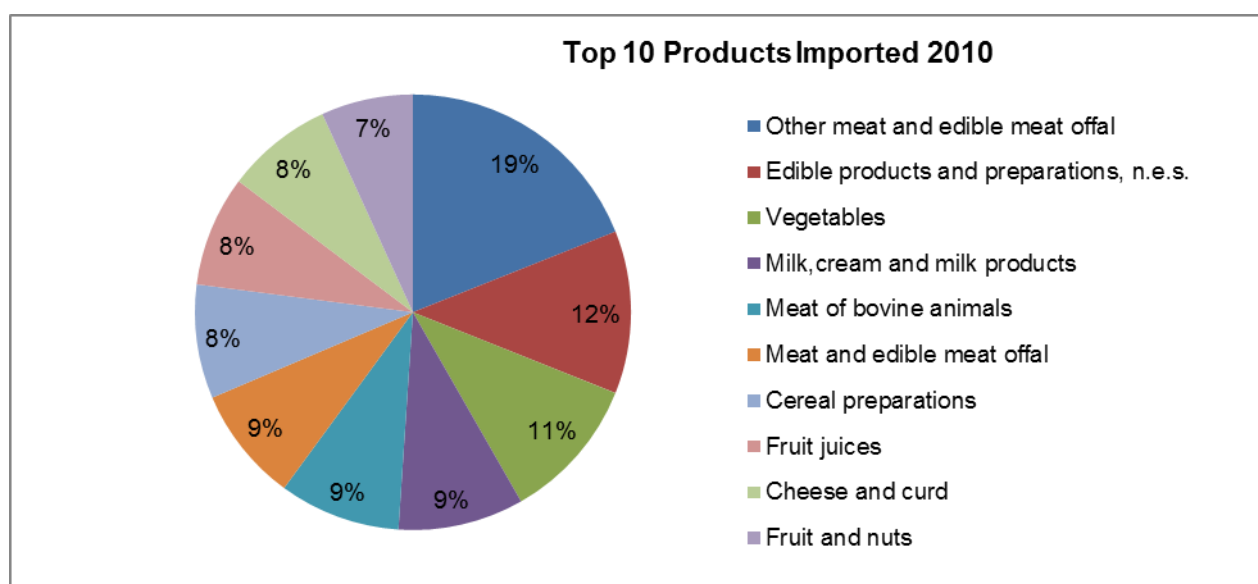
<sup>196</sup> Private appropriability refers to the environmental factors that govern a firm's ability to generate profits from the introduction of a new idea or technology.

## B. Analysis of Imports by Category

### Food and live animals Imports

- Curacao's imports of food and live animals varied over the period 2006-2010. In 2006, imports recorded were NAf 323.7 million (Figure 79). This figure gradually increased to NAf 415.4 million in 2008, after which it declined slightly in 2009 to NAf 390 million and then increased faintly to NAf 399.5 million in 2010 or 18% of total imports.
- Among food and live animal imports, the most commonly demanded goods include: other meat and other edible meat offal which represented 19% of food and live animal products; edible products and preparations (12%); vegetables (11%); milk and cream (9%); and, meat of bovine animals (9%). Together, these top 5 demanded goods represent 60% of food and live animal imports.
- Other commonly demanded goods include meat and edible meat offal, cereal preparations, fruit and vegetable juices, fruits and nuts and cheese and curd, each of which were valued just over NAf 20 million.

Figure 79 Food and Live Animals Imports (2006-2010) in Ang. '000



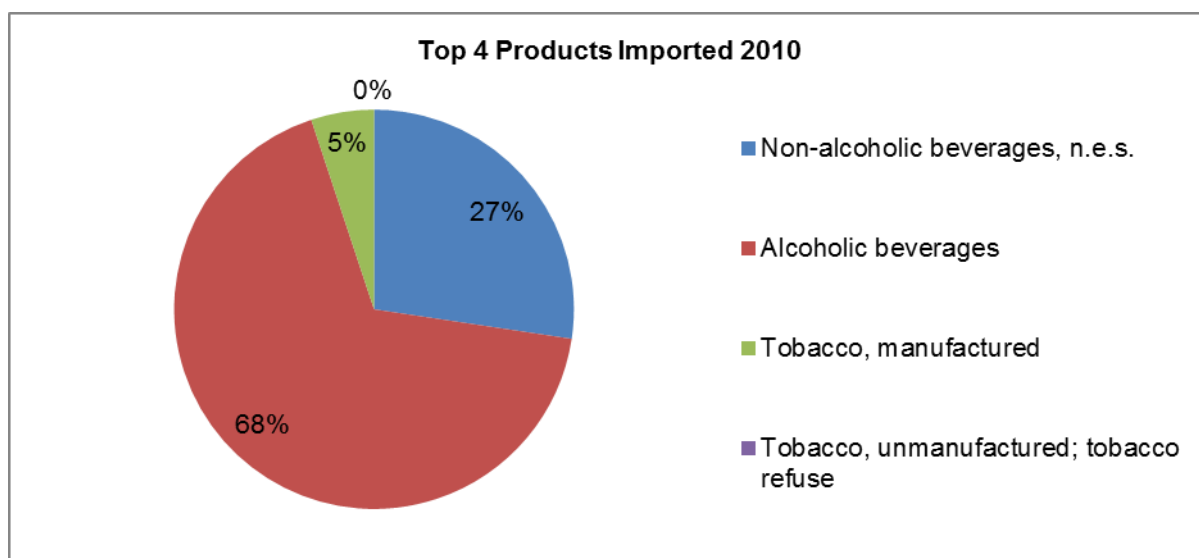
	2006	2007	2008	2009	2010
<b>Total Food and live animals Imports</b>	323,736	359,182	415,435	390,007	399,533

Source: Central Bureau of Statistics, Curacao

## Beverages and Tobacco

- Imports of beverages and tobacco increased steadily for the period 2006 – 2010 climbing from NAf 59.9 million in 2006 to NAf 93.5 million in 2010. Imports of beverages and tobacco were one of the only categories of imports that did not record a decline in 2009 when nearly all other imports declined with the global downturn in imports.
- Between 2006 and 2010, only 4 types of goods in this category were imported: alcoholic beverages, which represented 68% of total imports; non-alcoholic beverages (27%); manufactured tobacco (5%); and unmanufactured tobacco, less than 1% of total imports).

Figure 80 Beverages and Tobacco Imports (2006-2010) in Ang. '000



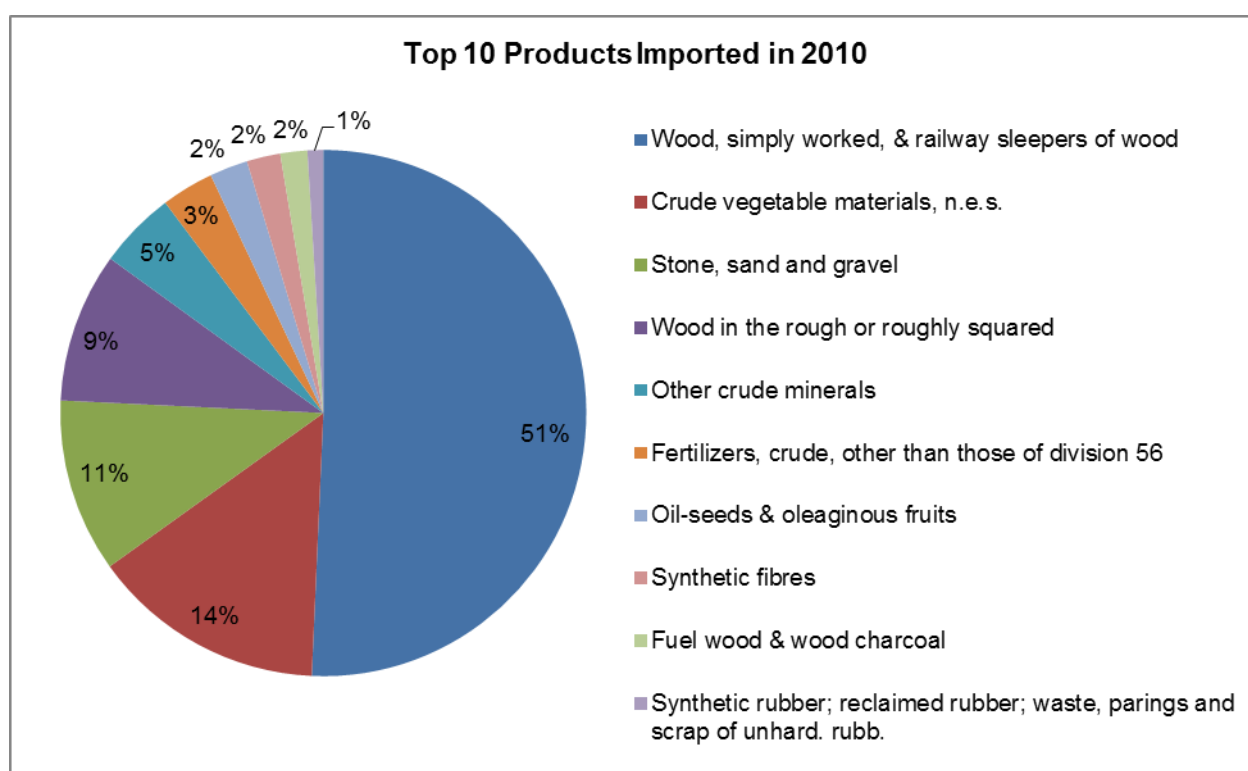
	2006	2007	2008	2009	2010
<b>Beverages and tobacco</b>	59,957	65,210	75,727	84,744	93,576

Source: Central Bureau of Statistics, Curacao

**Crude materials, inedible, except fuels:**

- Curacao's imports of crude materials, inedible, except fuels varied over the period 2006-2010. In 2006, imports recorded were NAf 22.8 million. This figure gradually increased to NAf 29.2 million in 2008, after which it declined in 2009 to NAf. 20,961 million and then further declined to NAf 25.6 million in 2010.
- The highest level of imports under this category included: wood and railway sleepers of wood (51%) of total imports; crude vegetable materials (14%); stone, sand and gravel (11%); wood in the rough or roughly squared (9%); and other crude materials (5%).
- Other goods typically imported under this category include: fertilizers, oil seeds and oleaginous fruits for extract, synthetic fibres suitable for spinning, fuel wood and wood charcoal, and synthetic rubber.

Figure 81 Crude materials, inedible, except fuels Imports (2006-2010) in Ang. '000



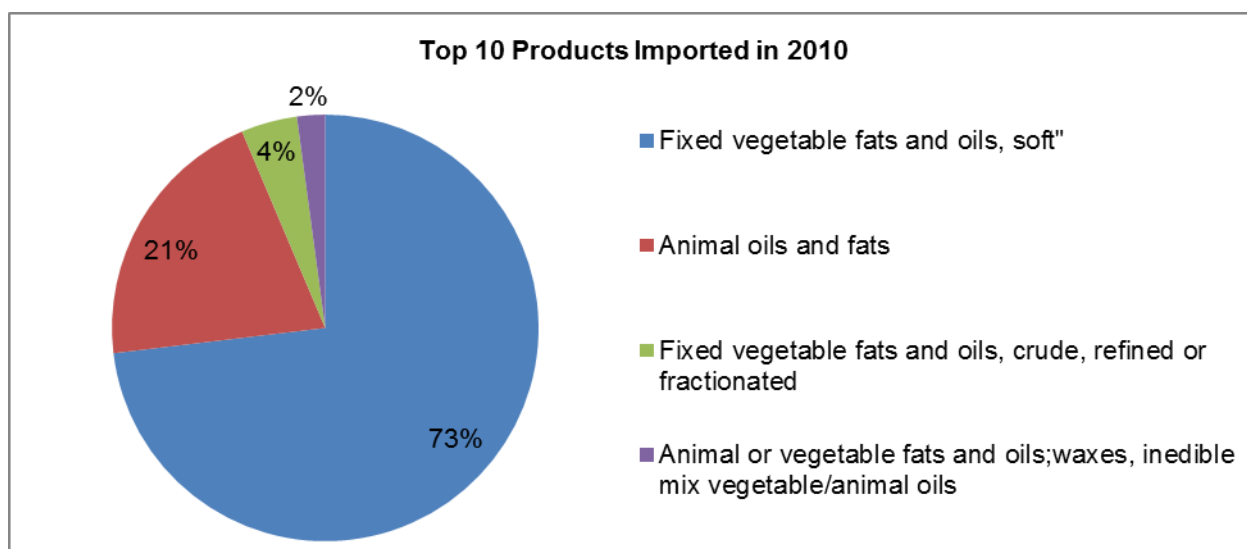
	2006	2007	2008	2009	2010
<b>Crude materials, inedible, except fuels</b>	22,856	24,970	29,214	20,961	25,063

Source: Central Bureau of Statistics, Curacao

### Animal and vegetable oils, and fats

- Imports of animal and vegetable oils fluctuated over the period 2006-2010. In 2006, imports were NAf 7.8 million. This figure gradually increased to NAf 12.2 million in 2008, after which it declined in 2009 to NAf 10.8 million and then further declined to NAf 10.7 million in 2010.
- For the 2006-2010 period, only four types of goods were imported in this category: fixed vegetable fats and oils (soft), which represented the greatest proportion of imports (73%); animal oils and fats (21%); fixed vegetable fats and oils, crude, refined or fractionated (4%); and, animal or vegetable fats and oils; waxes, inedible mix vegetable/animal oils (2%).

Figure 82 Animal and vegetable oils, and fats Imports (2006-2010) in Ang. '000



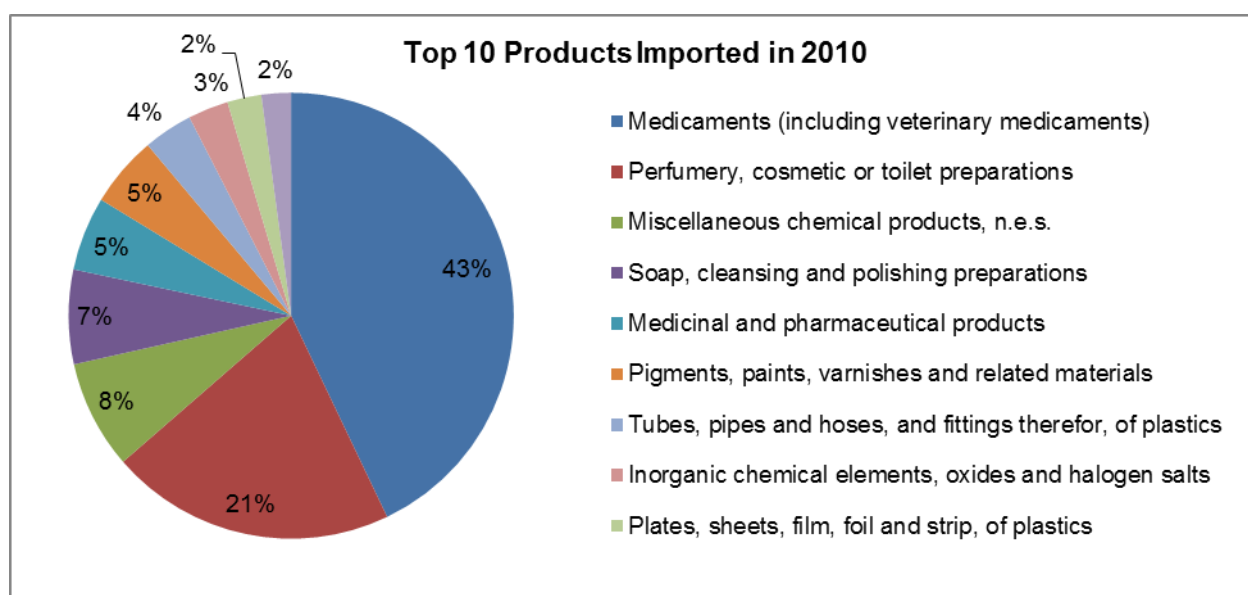
	2006	2007	2008	2009	2010
<b>Animal and vegetable oils, and fats</b>	7,871	8,479	12,228	10,838	10,795

Source: Central Bureau of Statistics, Curacao

## Chemical products

- Curacao's imports of chemicals also fluctuated over the period 2006-2010. In 2006, imports were NAf 196.5 million. This figure gradually increased to NAf 288.7 million in 2008, after which it declined in 2009 to NAf 266.7 million and then further declined to NAf 249.4 million in 2010.
- The highest component of imports in this category in 2010 were medicaments which accounted for 43% of chemical imports; perfumery, cosmetic and toilet preparations (21%); miscellaneous chemical products (8%); soap, cleansing and polishing preparations (7%) and medicinal and pharmaceutical products (5%).
- Other commonly demand chemical products include pigments, pants garnishes and related material; tubes, pipes and hoses and fittings thereof of plastics; inorganic chemical elements, oxides and halogen salts; plates, sheets, film, foil and strip, of plastics; and insecticides, rodenticides, fungicides, herbicides and anti-sprouting products

Figure 83 Chemical Products Imports (2006-2010) in Ang. '000



	2006	2007	2008	2009	2010
<b>Chemical products</b>	196,549	232,380	288,710	266,790	249,440

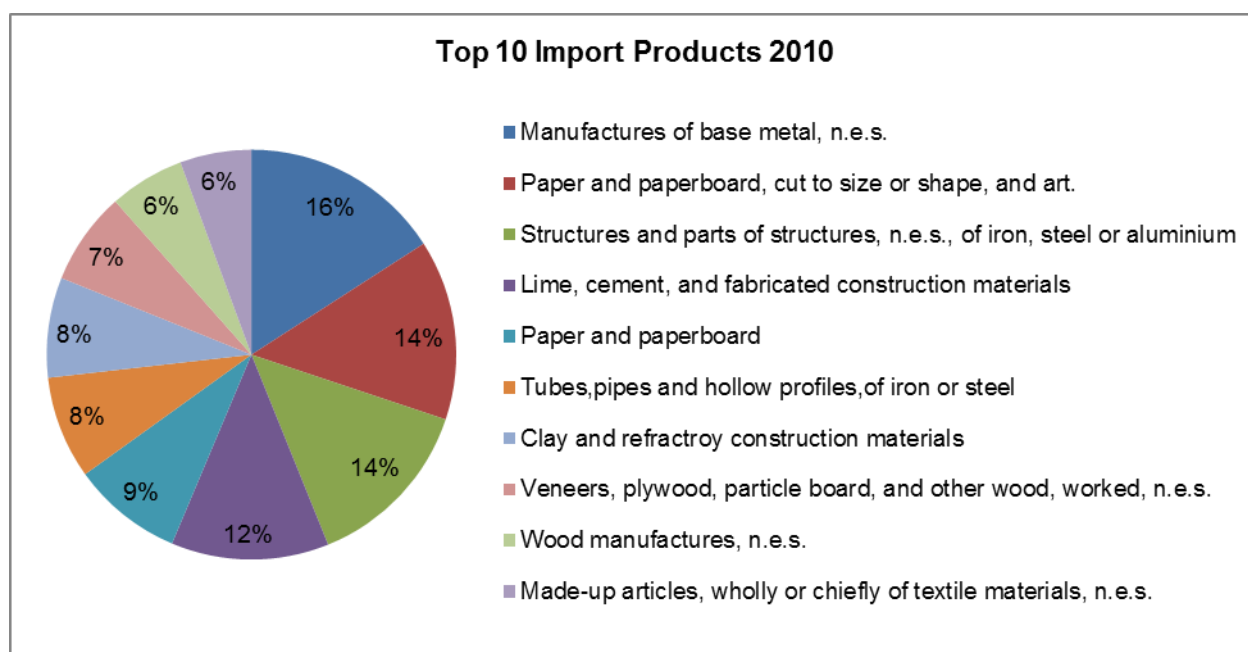
Source: Central Bureau of Statistics, Curacao



## Manufactured Goods

- Curacao's manufactured goods imports increased from NAf 237.5 million in 2006 to NAf 359.3 million in 2009, but then noticeably declined in 2010 to record a total of NAf 307.7 million.
- Amongst the most highly imported manufactured goods in 2010 were: manufactures of base metal, which accounted of 16% of manufactured goods imports; paper and paperboard, cut to size, shape or art (14%); structures and parts of structures (14%); lime, cement and fabricated construction material (12%); and, paper and paperboard (9%).
- Other commonly imported manufactured goods include: tubes, pipes and hollow profiles/fittings of iron or steel; clay and refractory construction materials; veneers, plywood, particle board and other wood, worked; wood manufactures; and, made-up articles, wholly or chiefly of textile materials.

Figure 84 Manufactured Goods Imports (2006-2010) in Ang. '000



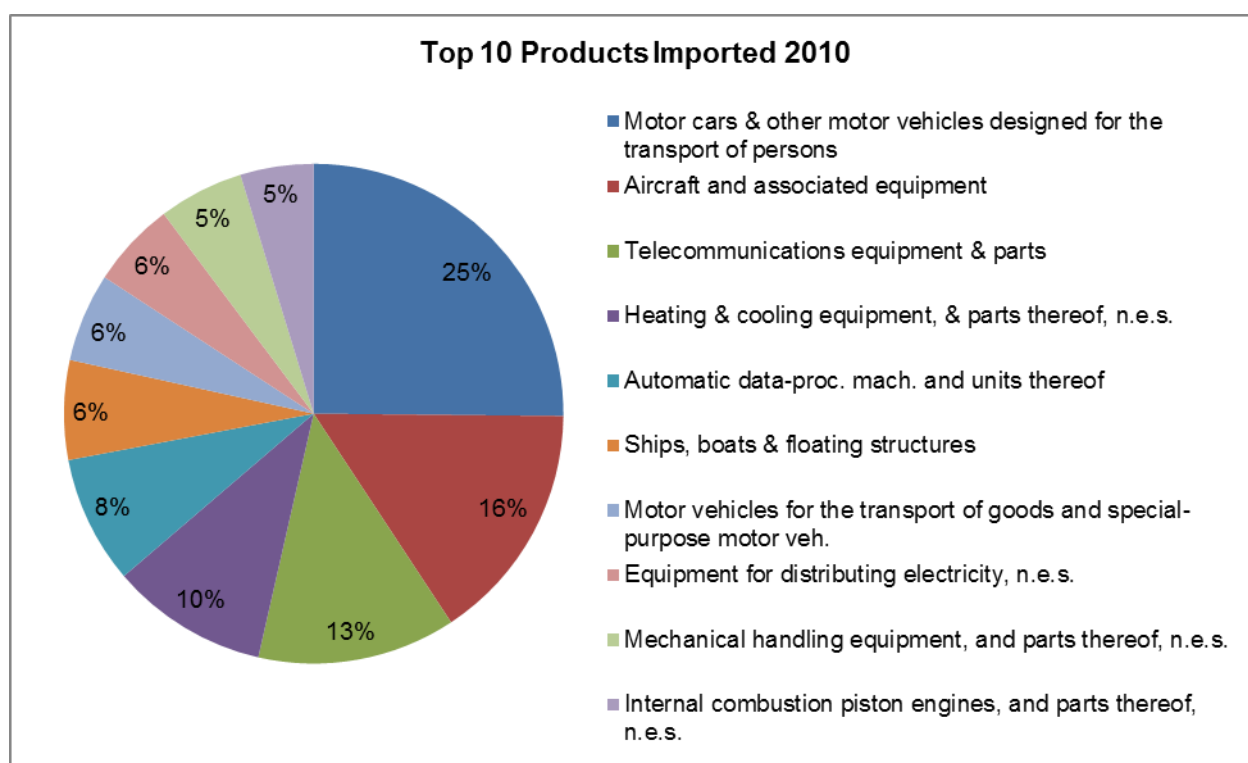
	2006	2007	2008	2009	2010
<b>Manufactured goods</b>	237,553	267,110	343,853	358,333	307,774

Source: Central Bureau of Statistics, Curacao

### Machinery and transport equipment

- For the period 2006-2010, imports of machinery and transport equipment accounted for 32% of total imports, the largest of any category of imports. Imports grew from NAf 510.4 million in 2006 to NAf 755.5 million in 2008. Imports declined to NAf 733.1 million, but increased in 2010 to record a total of NAf 786.9 million.
- The highest levels of imports in this category include: motor cars and other motor vehicles designed for the transport of persons, which represented 25% of total imports; aircraft and associated equipment (16%); telecommunications equipment (13%); heating and cooling equipment, and parts thereof (10%); and automatic data-processing machines and units thereof (9%).
- Other imports in this category included: ships, boats and floating structures, motor vehicles for the transport of goods and special purpose vehicles; equipment for distributing electricity, mechanical handling equipment and parts thereof; and internal combustion piston engines, and parts thereof.

Figure 85 Machinery and Transport Equipment Imports (2006-2010) in Ang. '000



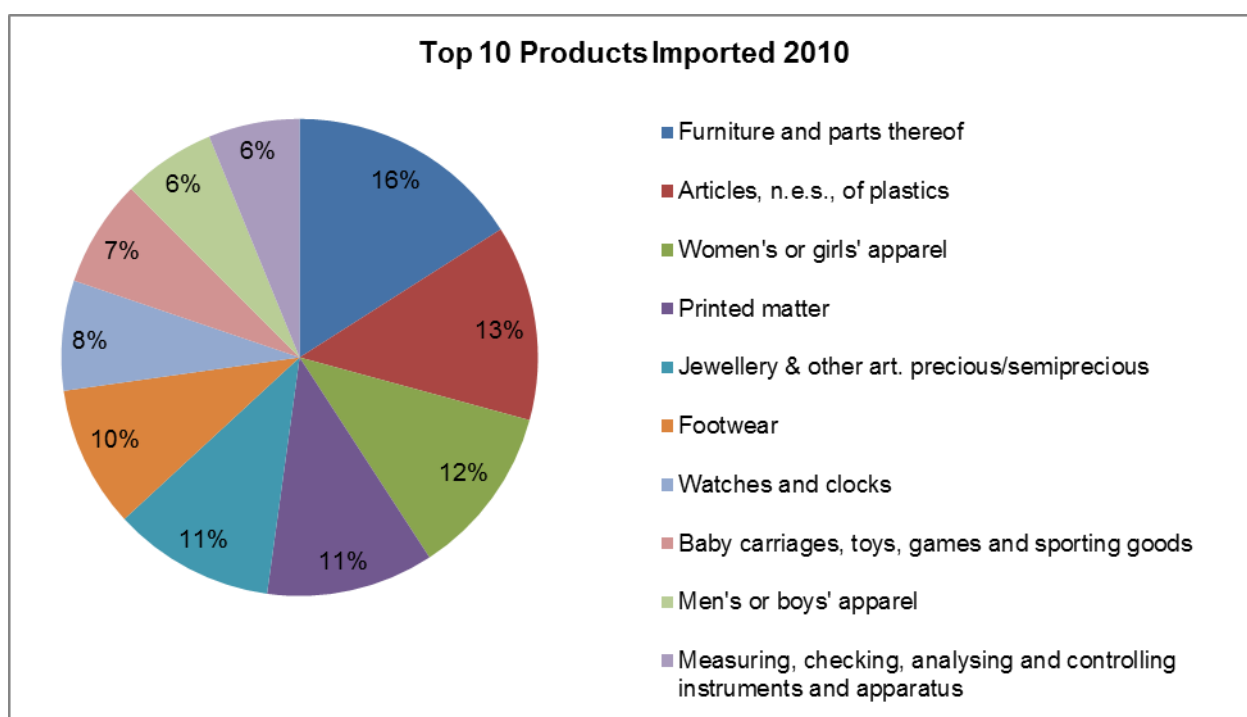
	2006	2007	2008	2009	2010
<b>Machinery and transport equipment</b>	510,478	565,310	755,729	733,167	786,960

Source: Central Bureau of Statistics, Curacao

### Miscellaneous Articles

- Curacao's imports of miscellaneous articles fluctuated over the period 2006-2010. In 2006, imports were NAf 317.3 million. This figure increased to NAf 452.5 million in 2008, after which it declined in 2009 to NAf 396.7 million and then further declined to NAf 369.8 million in 2010. For the period, imports of miscellaneous accounted for 18% of total imports, the second highest category.
- The products with highest levels of imports in 2010 in this category included: furniture and parts thereof (16%); articles of plastics (13%); women or girl's apparel represented 12% of total imports of miscellaneous goods; printed matter (11%); and jewellery and other art which also represented (11%).
- Other commonly imported goods in 2010 included: footwear; watches and clocks; baby carriages, toys, games and sporting goods; men or boys clothing; and, measuring checking analysing and controlling instruments and apparatus

Figure 86 Miscellaneous Articles Imports (2006-2010) in Ang. '000

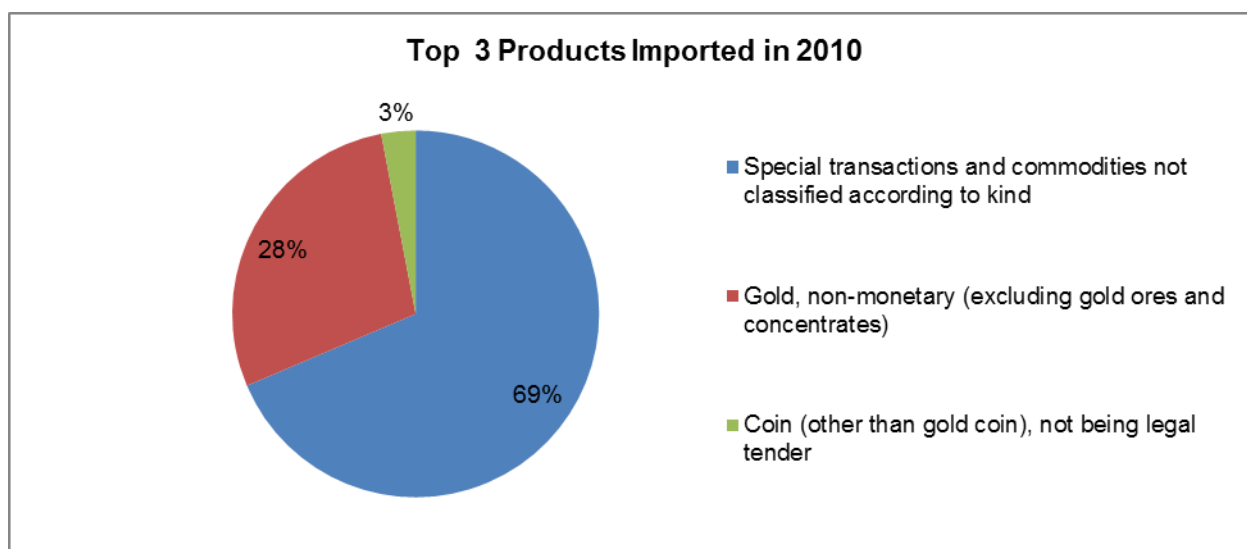


	2006	2007	2008	2009	2010
<b>Miscellaneous articles</b>	317,457	346,472	451,540	396,781	369,885

Source: Central Bureau of Statistics, Curacao

**Commodities and transactions n.e.c.**

- Imports of commodities and transactions steadily declined from NAf 33 million in 2006 to NAf 25.6 million in 2008. In 2009, imports increased slightly to NAf 20.7 million, but declined drastically in 2010 to NAf 6.5 million.
- In 2010, only 3 types of commodities and transactions were imported. These included: special transactions and commodities not classified according to kind, which accounted for 69% of total imports; non-monetary gold (28%); and coins (other than gold coins), not being legal tender which represented 3%.

*Figure 87 Commodities and transactions n.e.c Imports (2006-2010 in Ang. '000)*

	2006	2007	2008	2009	2010
<b>Commodities and transactions n.e.c.</b>	33,076	25,722	25,667	20,759	6,541

Source: Central Bureau of Statistics, Curacao

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