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Mauritius Vision 2020: A summary

Working Paper NRFE 01/11

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1.0 Background & Purpose

The purpose of this information paper is to provide an overview of a past foresight study carried out in Mauritius in the 1992-1994 period. The focus of the present document will therefore be on the overall nature, scope, limitations and lessons learnt from this past effort.

2.0 Introduction

The “**Vision 2020**” was a foresight study released in 1997. It was part of a regional exercise carried by the African Futures and was referred to as the **National Long Term Perspective Studies**” (NLTPS).

This was following a consensus which emerged in Maastricht at a high level conference on Africa, organized in 1990 by the Dutch government. This consensus recognized the need to adopt long term perspectives as an appropriate framework for promoting sustainable development in Africa. Parties to the consensus included the World Bank (ADB), the African Development Bank, the United Nations Economic Commission for Africa (UNECA) and the United Nations Development Programme (UNDP). Subsequently, the donor community requested that UNDP channel international support to those countries in Africa wishing to create a long term vision for development. In order to accomplish this mission, UNDP established the African Futures/National Long Term Perspective Studies (NLTPS) program in 1992.

In Mauritius NLTPS was initiated by the United Nations Development Programme and overseen by the former Ministry of Economic Development & Regional, Productivity and Regional Development (MEDRPRD).

This exercise also benefitted from the technical assistance from the Common Wealth Consultative Group on Technology Management. NLTPS was also carried out in 13 other countries in the African region, namely, Cape Verde, Cote d' Ivoire, Gabon, Guinea-Bissau, Madagascar, Malawi, Sao Tome and Principe, Seychelles, Swaziland, Tanzania, Uganda, Zambia and Zimbabwe.

The information available on the methods used to generate the output of this study is scarce. However, the NLTPS exercise carried out in Mauritius displays the following characteristics which are consistent with foresight studies, as proposed by Miles (2008):

- “Long-term orientation aimed at informing on-going decision making in the present, grounded in the assumption that the future is open and can be shaped by in positive ways by improved understanding of opportunities and threats, driving forces and underlying process change”,

- Use of a range of formal tools and techniques for developing long-term analyses-including survey methods such as Delphi, scenarios, trend analysis, SWOTs, etc,
- Involvement of a wide pool of expertise, and often of stakeholders, more generally, to access relevant knowledge, to engage more participants in the policy process and to establish networks for ongoing coordination of action and sharing of information,
- Crossing disciplinary boundaries to address emerging real-world problems.

3.0 The NLTPS Programme

It was an interactive approach which focused on providing consistent long term development strategies. It was also designed to provide answers to the following questions for each nation participating in the programme:

- What were the long term aspirations and goals of the society? (i.e. kind of a nation in 25 years)
- What were the characteristics of the society and the issues facing it which could affect the ability of the country to create that desired future? (i.e. what are the main trends, uncertainties, future-bearing events, strengths, weaknesses, opportunities, and threats within the internal and external environment of the society that are important for the future?)
- What were the alternative future scenarios? (i.e. given the issues and factors identified above, in what kind of environment would the society be expected to function in the future?)
- Given the scenarios identified above, what should be the vision of the society? (i.e. what kind of society should the nation be striving to create in the future given foreseeable possibilities and constraints?)
- What were the strategic issues and challenges, that must be confronted if the society were to achieve its vision? What were the options available to address these strategic issues?
- What were the appropriate development strategies for the nation and how should it proceed?

5 Phases were involved in answering those questions:

1. **Issue Identification** - consisted of the identification of national aspirations as well as issues and themes that became the focus of the NLTPS exercise;

2. **Basic Studies** (*Constructing the Base*) phase - included the identification of critical trends and dynamics in society, key variables and factors, analyses of actors and their roles, of future-bearing events and of strengths, weaknesses, opportunities, and threats facing the country as it tried to create a desired future;

3. **Scenario Construction** - included the identification of assumptions and mapping out of alternative scenarios for the future, as well as the creation of a holistic vision of the future based on the collective aspirations of the people, and guided by possibilities as well as constraints;

4. **Strategy Formulation** phase - focused on the development of broad strategies and policies for managing the development process. It was based on the analysis of the country situation, as revealed in the previous steps;

5. **Development Planning** phase - involved the preparation of medium- and short-term plans and programs by government planning agencies to achieve the desired future, in successive phases.

3.1 The NLTPS in Mauritius: Methodology

The MEDRPRD was responsible for the NLTPS exercise. A small team, comprising the MEDRPRD Director, a Principal Economist, and an Economist were in charge of coordinating activities. A Core Group made up of the Chairmen and secretaries of the different Working Groups (WGs) provided overall guidance. The NLTPS exercise was broken down in the following phases, for each Working Group, as listed in Table 1 below:

Phase 1: <u>Issues Identification</u>	Phase 2: <u>Basic Studies</u>	Phase 3: <u>Scenario Formulation</u>	Phase 4: <u>Strategy Formulation</u>	Phase 5: <u>Development Planning</u>
Sectoral Working Groups on Issues	Working Groups on Base Studies	1 st National Workshop for Stakeholder representatives to draft vision & strategy	4 Segment groups for national consultations. 2 nd National workshop on vision & strategy	Loop Method used from Phases I-IV

Table 1: Phases 1-5

8 autonomous Working Groups (WGs) were set up to do sectoral reviews and produce detailed input. The Commonwealth Consultative Group on Technology Management

also provided technical assistance to the NLTPS team. WGs were free to identify their members and to employ outside expertise. As seen in Table 2 below, the following **WGs** were set up per sector and overseen by a chairman and a secretary.

Working Group	Chairperson	Secretary
Society and Culture	Mr Mvayid,CMG	Dr (Ms) S.Bunwaree-Ramarai
Science and Technology	Dr C Ricaud	Prof. J Baguant
Environment	Ms N Burn	Dr M Koenig
Economy	Prof R Lamusse	Mr D Dusoruth
Employment	Manrakhan	Ms A C Timol
Industry	Mr G Chung Tick Khan	Mr S Futloo
Tourism	Sir H Tirvengadum	Mr R Makoond
Agriculture	Late Prof R Antoine	Mr R Hazareesingh

Table 2: Working Group/Chairperson/Secretary

4 Stakeholder Consultation Segments (Groups) included a Cabinet level segment. National Consultation, including a National Conference, were efficient for achieving consensus on the vision.

Each working group was led by experts in their field. They worked separately and devised their own methodology. As a result the methods/techniques used by each WG for this exercise differed both in nature and scope. The variance in quality of the output generated is also very high. While Foresighting techniques do not appear to have been used systematically, some of the underlying themes and principles of these tools and techniques appear to have informed the process.

The Foresight techniques which appear to have been used are thus assessed against the framework devised by the University of Manchester OZCAN, to illustrate the gaps noticed in the process for each WG.

3.1.1 Society and Culture: Methodology

The above WG looked into the following:

- Welfare,
- Social Relations,
- Language and Cultural Diversity, National Unity and Integration),
- Education & Training,
- Media.

Though not explicitly based on the techniques listed below (based on what is known), the overall process used to generate the output appeared to have used elements from the following foresight tools/techniques, as listed in Table 3 below:

Intelligence	Imagination	Integration	Interpretation	Intervention
Scanning	Scenario Planning	Scoring/ Voting/Rating	SWOT Analysis	
Literature Review	Wild Card Weak Signals	Benefit/Cost/ Risk Analysis		Priority List
Trends/Drivers Indicators				
Interviews				

Table 3: Society and Culture

3.1.2 Science and Technology: (unreliable, nothing reported on Methodology in this chapter)

The above WG looked into the following:

- Forging the future (General policy strategy, Human Resources Development, R&D Technology)
- Major physical resources (Water, Energy, Telecommunications, Health)
- Technology for business opportunities (Agriculture, Biotechnology, Jewellery, Tourism, Mauritius as conference centre, Mauritius as retirement centre)
- Marine Technologies,
- Services (Information Technology, Printing, Financial services, Health Care, Consulting and Technical Services)

Though not explicitly based on the techniques listed below (based on what is known), the overall process used to generate the output appeared to have used elements from the following foresight tools/techniques, as listed in Table 4 below:

Intelligence	Imagination	Integration	Interpretation	Intervention
Scanning	Scenario Planning	Voting /Scoring/ Rating	Road Mapping	Critical/Key Technologies
Literature Review	Agent Based Modelling	SWOT Analysis		Priority List
Trends/Drivers Indicators	Simulation & Modelling		Strategic Planning	R & D Planning

Table 4: Science and Technology

3.1.3 Environment (unreliable, nothing reported on Methodology in this chapter)

The above WG looked into the following:

- Goals: A vision for Mauritius 2020 (Function & Values of the environment, Evolution of environmental Management),
- The legacy of past developments in Mauritius (population and fertility changes, physical planning, economic growth, structural adjustment, environmental degradation),
- Major environmental issues (climate change, freshwater resources, conservation and biodiversity, solid waste management, atmospheric pollution),
- Environmental policy and practice (policy & governance legal framework, social change and attitudes, project sustainability issues, institutional constraints etc).

Though not explicitly based on the techniques listed below (based on what is known), the overall process used to generate the output appeared to have used elements from the following foresight tools/techniques, as seen in Table 5 below.

Intelligence	Imagination	Integration	Interpretation	Intervention
Scanning	Scenario Planning	Voting /Scoring/ Rating	SWOT	
Literature Review	Wild Card Weak Signals	Cross Impact Analysis	Backcasting	
Trends/Drivers Indicators				Impact Assessment
			Strategic Planning	

Table 5: Environment

3.1.4 Economy (unreliable, nothing reported on Methodology in this chapter)

The above WG looked into the following:

- Current macroeconomic environment (output, expenditure, employment, inflation, balance of payment, public finance, monetary policy)
- Mauritian Economy (output, per capita income, savings and investments, fiscal performance, balance of payments, employment, wages& inflation, Money and Finance)
- Factors influencing development (future environment)

- Policy framework (Education, IT, Role of Government, Fiscal Policy, Financial System, Foreign Investment, Trade, Overseas Mauritians, Monitoring)

Though not explicitly based on the techniques listed below (based on what is known), the overall process used to generate the output appeared to have used elements from the following foresight tools/techniques, as seen in Table 6 below:

Intelligence	Imagination	Integration	Interpretation	Intervention
Scanning	Scenario Planning	Voting /Scoring/ Rating	Backcasting	Priority Lists
Literature Review				Critical Key Technologies
Trends/Drivers Indicators	Agent Based Modelling		Linear Programming	
Systems Analysis	Simulation &Modelling		Strategic Planning	

Table 6: Science and Technology

3.1.5 Employment (unreliable, nothing reported on Methodology in this chapter)

The above WG looked into the following:

- Population projections (fertility, mortality, migration, population, sex ratio, age-structure)
- Labour Force (Males, Females, potential labour force),
- Employment prospects employment projections
- Unemployment
- Occupational and skills (occupational trends, international economic and strategic pressures, IT)

- Education and training
- Productivity
- Labour relations

Though not explicitly based on the techniques listed below (based on what is known), the overall process used to generate the output appeared to have used elements from the following foresight tools/techniques, as seen in as listed in Table 7:

Intelligence	Imagination	Integration	Interpretation	Intervention
Scanning	Scenario Planning	Voting /Scoring/ Rating	Backcasting	Priority Lists
Literature Review			Logic Charts	Critical/Key Technologies
Trends/Drivers Indicators	Agent-Based Modelling		Strategic Planning	

Table 7: Employment

3.1.6 Industry (unreliable, nothing reported on Methodology in this chapter)

The above WG looked into the following:

- A well educated Mauritian society with an industrial culture (Industry & education, Areas of action)
- Developing an information technology strategy (Developing a software industry, required actions)
- Textile sector (Now & Tomorrow)

- Textile & diversification (review of key factors which led to industrialisation, Threats, Weakness, Future orientation)
- The environment: a scenario of poles of power (a more competitive world, a more complex world)
- Role of Government

Though not explicitly based on the techniques listed below (based on what is known), the overall process used to generate the output appeared to have used elements from the following foresight tools/techniques, as seen in Table 8 below:

Intelligence	Imagination	Integration	Interpretation	Intervention
Scanning	Scenario Planning	Voting /Scoring/ Rating	Backcasting	Priority Lists
Literature Review			SWOT	Critical/Key Technologies
Trends/Drivers Indicators			Logic Charts	Action Planning
Systems Analysis				

Table 8: Industry

3.1.7 Tourism (unreliable, nothing reported on Methodology in this chapter)

The above WG looked into the following:

- Review of the tourist sector (the product, generating markets, tourist profile, contribution of tourism to the economy)
- Trends and factors (variables external to tourism)
- Quantitative Analysis (all arrivals),

- A quality destination in 2020 and beyond (the physical carrying capacity, air transport, infrastructure, institutional support)

Though not explicitly based on the techniques listed below (based on what is known), the overall process used to generate the output appeared to have used elements from the following foresight tools/techniques, as listed in Table 9 below:

Intelligence	Imagination	Integration	Interpretation	Intervention
Scanning	Scenario Planning	Voting /Scoring/ Rating		Priority Lists
Literature Review				
Trends/Drivers Indicators		Cross Impact Analysis		Impact Assessment
Systems Analysis	Simulation & Modelling			

Table 9: Tourism

3.1.8 Agriculture (unreliable, nothing reported on Methodology in this chapter)

The above WG looked into the following:

- Sugar (past 25 years, factors influencing development, long-term goals, action plans),
- Sugar industry (current situation, evolution of the situation, factors influencing development, likely changes by year 2020)
- Crop diversification (trends in production, impact of anticipated changes, anticipated demand, opportunities, opportunities for the future, conditions for success)
- Fruits (Prospects, Banana, Citrus, Pineapple, Grapes, Other fruits)
- Livestock (Milk, Beef, Goat and sheep, Poultry meat and eggs, Pork, Deer)
- Forestry Sector (Review of the current situation, An analysis of development during the past 25 yrs, Identification of the main factors influencing development, monitoring requirements for the next 25 years)
- Forestry Sector (review of the current situation, analysis of development during the past 25 years, an identification of the main factors, (global, regional & domestic) influencing huge development)
- Fisheries and aquaculture (present status, vision of the year 2020, historical views)

- Effects of GATT on agricultural production (support, higher import prices, trips, trims, seeds and planting material and GATT, conclusion)

Though not explicitly based on the techniques listed below (based on what is known), the overall process used to generate the output appeared to have used elements from the following foresight tools/techniques as listed in Table 10:

Intelligence	Imagination	Integration	Interpretation	Intervention
Scanning	Scenario Planning	Voting /Scoring/ Rating	Backcasting	Priority Lists
Literature Review				Action Planning
Trends/Drivers Indicators		Benefit/Cost /Risk Analysis		

Table 10: Agriculture

3.2 General lessons of Experience based on the NLTPs process

These lessons can be applied to the Mauritian context but are not specific to the exercise conducted in Mauritius from 1992-1994. They are derived from seven national long term perspective reports (case studies) which were presented at a workshop in Entebbe, in September 1998, 4 years after the exercise was completed in Mauritius. Since the exercise was still ongoing, not all countries mentioned previously were present. The workshop participants discussed the various problems and difficulties which each NLTPS encountered, how they were resolved and what methodological adaptations were made.

Vision: truly shared vision, developed through national dialogue, can provide people with a sense of direction and discovery, and should serve as the guiding framework for national development action.

Framework & Methodology: experience demonstrated the importance of setting up an institutional framework which is appropriate to the country's existing social, political and technical structures before the study was implemented. Those activities and stages which experienced the smoothest implementation, benefited from arrangements that minimized the ruptures imposed by the stages of the study. Studies that used either the Loop or the Sequential approaches had to make accommodations/adjustments on particular features or aspects of the NLTPS methodology.

Ruptures: Several ruptures occurred when implementing the NLTPS. These happened most frequently between the study phase and the operational phase. They also occurred at the level of the participation of various actors and new actors, of necessity, emerge at each phase. For example, the team undertaking the study was often different from the agencies and entities implementing the strategy, in government or in the private sector or in civil society.

Rupture also occurred during the activities. As an illustration, phases I –IV were characterized by exploratory activities designed to expose feasible options for the future which the country could face, while phase V involved normative judgement - where choices were made by the planning decision makers. Many of these ruptures could also be traced to fault lines in the institutional mechanisms set up for implementing the NLTPS. These breaks occurred when the anticipated planning activities were not implemented and when the high-level support of the teams doing the initial studies, were absent during the latter stages of NLTPS. In spite of effective institutional mechanisms and structures for securing high-level support for NLTPS, which several countries have successfully put in place, many of the NLTPS studies lagged behind in terms of the implementation phase.

Feasibility: In general terms, the lessons of experience showed that some countries differed with respect to the anticipated objectives of NLTPS. Those countries that identified achievable objectives, which were not as far-reaching as the NLTPS objectives, often succeeded in attaining those objectives. Those countries that really expected to be able to use the NLTPS approach to planning, found the objectives difficult to meet, relative to the final results of the particular NLTPS.

3.3 Recommendations based on the NLTPS process

The following general feedback was obtained from participants in the NLTPS foresight exercise in the 14 countries mentioned previously. While not specific to Mauritius, this information could be useful in designing future Foresight studies in the present national context:

- the process should be short, and framed in a pragmatic, coherent framework. This would minimize or avoid the rupture that can occur between the study phase and the operationalisation phase,
- operationalisation, or adapting the NLTPS methodology and carrying out the study, cannot be carried out only by government. Actors from the private sector and civil society are critical partners,

- the likelihood of a successful operationalisation of the strategy is greater when activities are undertaken within existing structure and organizations,
- programs and initiatives that are already under way are frequently not sufficiently considered prior to operationalisation, even when they are referred to during earlier stages of the study,
- quantitative methods could be used downstream during the stages leading up to scenario construction, when the basis for scenarios is built. They serve to illustrate the quantitative nature of the resulting scenarios,
- exploratory scenarios should be prepared for the internal consideration of the impact of the external environment, which was not always considered,
- it is important to reconcile the rapid technological, social, and political changes that take place during the life span of study, with the long term horizon of study,
- the process of scenario construction should be kept simple; training in scenario construction could be customized to provide useful results; cross-impact analysis could be exploited more fully.

Measures that need to be taken to reduce the risk of unattained objectives include:

- ensuring that institutional mechanisms for implementation of the strategy are incorporated into the methodology from the beginning,
- strengthening the efforts to engage political support for the process during entire process, and not waiting until the study phase is complete,
- involving the research teams, at least in an ad hoc manner, during the implementation of the strategy, as the study is envisioned as a continuous and iterative learning process.

It can be said that the operationalization difficulties faced by the NLTPS were not unique to the overall study, or ascribable to the methodology as such:

- many new initiatives require "champions" in the form of institutions, personalities, and marketing strategies, which help to familiarize the entire development community with the foresight process. This in turn has a multiplier effect on the national institutions, in government, private sector, and civil society , which share the responsibility for implementing the strategy.

4.0 Foresight exercise as a source of input for the National Development Strategy in Mauritius

The National Strategy for Sustainable Development (NSSD) 1999-2005, continued from where the NLTPS stopped. It aimed to channel the vision expressed in the Vision 2020 document and to translate it into practical terms. The Programme designed to achieve short-term objectives within that time period were structured around:

- A successful economy
- A sustainable Environment,
- Human Development,
- Beyond National Frontiers.

In some cases it used some of the scenarios developed in Vision 2020 as a basis to develop further scenarios to tackle potential issues such as poorer economic performance than forecasted, rising unemployment, slower and more uncertain growth incomes, increasing pressures on the environment, severe strains on the fabric of society.

The added value of the input provided by the Vision 2020 study was based on the fact that:

- As a comprehensive foresight study, it looked at the future as a whole and not from the perspective of any particular organisation or simply the economy. It also took into consideration future development in terms of the environment, human development, community relations, social services and good performance,
- It drew on the knowledge and experience of experts from all parts of the nation (from the Government, academia, business, voluntary organisations and other fields who worked together to analyse issues on how to go ahead for a better future,
- Besides being a consensual process, this foresight study was an international exercise. It took into account current and prospective developments in the rest of the region and the world at large and it drew on technical support from overseas,
- Long-term objectives, when broken down into more short-term oriented objectives, appeared manageable and realistic.

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