Strategic Economic Plan
Republic of Maldives

Ministry of Planning and National Development
# MALDIVES’ STRATEGIC ECONOMIC PLAN

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ABBREVIATIONS USED IN THE REPORT

ASEAN  Association of Southeast Asian Nations
BOT    Build-Operate-Transer
CPF    Central Provident Fund (Singapore)
DFI    Direct Foreign Investment
EEZ    Exclusive Economic Zone
EU     European Union
FAO    Food and Agriculture Organisation
FTA    Free Trade Agreement
GDP    Gross Domestic Product
HRD    Human Resource Development
HRM    Human Resource Management
ICT    Information and Communication Technology
IDA    International Development Agency
IFI    International Financial Institutions
IT     Information Technology
KBE    Knowledge-based Economy
MIFCO  Maldives Industrial Fisheries Company
MOFAMR Ministry of Fisheries, Agriculture and Marine Resources
MMA    Maldives Monetary Authority
MNC    Multinational Corporation
NIE    Newly Industrialising Economy
OCAD   Office of the Commissioner for Aquaculture Development (Canada)
OECD   Organisation for Economic Cooperation and Development
OFC    Offshore Banking and Financial Centre
PLS    Port and Logistic Services
PPP    Public-Private Partnership
SAARC  South Asian Association for Regional Cooperation
SAPTA  South Asian Preferential Trade Arrangement
SDF    Skills Development Fund
SEP    Strategic Economic Plan
SME    Small Medium Enterprises
TOR    Terms of Reference
UNDP   United Nations Development Programme
WTO    World Trade Organisation
EXECUTIVE SUMMARY

The International Trade Institute of Singapore (ITIS) has been appointed by the Republic of Maldives on October 2000 to develop the Strategic Economic Plan (SEP) for the country. The Terms of Reference for Phase 1 of this project are as follows:

• Review and analyse Maldives’ economic structure to identify key economic sectors and drivers, their respective opportunities and threats as well as their medium term sustainability.

• Formulate appropriate national policies and strategies towards achieving rapid economic growth, given the current economic situation.

• Identify potential areas for diversification with linkages to major industry.

Maldives, like other island economies, has a small domestic market and limited labour force. Hence, foreign investors are not eager to invest unless there are special attractions. The consulting team has also identified two other factors that may affect Maldives’ progress towards Vision 2020:

• Export is highly dependent on one commodity – tuna, and one service driver - tourism.

• The possible graduation of Maldives to a “developing country” status, hence, it may no longer be eligible for preferential treatment enjoyed by “Least Developed Countries” for exports to developed countries and for securing of special developmental loans.

The direct impact of these factors is a highly volatile and vulnerable economy with limited employment opportunities for the people. This can become a potential social issue. Nevertheless, the impact of these factors can be mitigated if appropriate measures were taken.

Maldives, however, is in a far better position than other island economies. The most intrinsic characteristic, which constitutes its key strength, is the way it has developed as an environmentally friendly and ecologically advanced economy. Maldives has an existing pool of experienced fishermen skilled in marine- and eco-friendly fishing methods for harvesting tuna. Maldives has also established premier tourist facilities on islands which are developed and managed in an environmentally friendly way. The huge pool of close to half a million tourists in 1999, about double the size of her population, is another strong advantage for Maldives as it provides a ready market for the expansion of the agricultural and fisheries sectors.

The consulting team’s recommendations centre on Maldives capitalising on these
factors and through a holistic cluster approach, incorporates traditional sectors which need expansion and upgrading with new economic sectors in an integrated fashion. There are possibilities that some of the individual recommendations proposed as part of this holistic study, may have already been raised in other studies that were previously conducted for Maldives. The merit of the cluster approach recommended lies in synergising the sectoral linkages to create stronger backward and forward, upstream and downstream links. Realistically, it would be unwise and wasteful to give up on some traditional sectors which can be revitalised and diversified under the clusters identified. A smooth transition, both economically and socially, also allows structural adjustments to be absorbed and adapted to.

The new economic clusters identified by the consulting team are those that play strong supporting role to the development of the core sectors and yet have the potential to be groomed into dynamic exportable sectors in future. These new pillars also possess the desirable characteristics of being differentiated, niche and high-value added. In all, Maldives will join the ranks of other new Knowledge-Based Economies (KBE) quickly and effectively.

Existing economic clusters which the consulting team feels have strong potential for further development to generate more economic benefits and stability for Maldives are as follows:

- Tourism
- Fisheries
- Agriculture

The achievement of the strategic thrusts for these traditional sectors will provide more stability to the economy. Specifically,

- **Tourism**: To sustain the present growth and develop new directions for the tourism sector in stages. By 2020, Maldives would not only have a thriving and differentiated tourism trade with holiday, education and business travellers, but also be able to provide tourism related consultancy and expertise to emerging island economies.

- **Fisheries**: To increase the value of all marine-related activities through diversification and high-value secondary production so as to generate sustainable productive employment and export earnings as well as introduce new marine-related activities with the view of providing consultancy and expertise to other economies.

- **Agriculture**: To position the agricultural sector to contribute more to employment, income, conserve foreign exchange as well as enhance food security.

The expansion of the traditional clusters will spin off new growth clusters which will complement the traditional ones so as to ensure the sustainability of Maldives’ economy in the
long run. The new growth clusters are,

- Port and Logistic Services (PLS)
- Information and Communication Technology (ICT) sector
- Offshore Banking and Financial Centre (OFC)

The strategic thrusts for these new clusters are,

- **PLS**: To establish a reliable inter-region and intra-region transportation system to support the development of core economic clusters in Maldives and to extend the role of the commercial ports in the South or/and North to complement other ports in South Asia for cargo trans-shipment in the long term.

- **ICT**: To develop a viable ICT sector that will support the development and upgrading of target economic sectors within the short and medium terms and to develop a strong export-oriented ICT industry, led by indigenous ICT firms in the long term.

- **OFC**: To provide necessary funding for the development of the Maldives’ economy and to become a leading OFC in Asia in the long term.

The development and expansion of the above economic clusters will in the mean time, generate greater needs for the upgrading of other supporting sectors, among which are construction, communication and transportation. The types of supporting services required for island development and management in Maldives are deemed to be very unique because of the small land mass on each island and the need for these islands to be self-sufficient. For instance, the growth of the tourism sector will require construction of resorts as well as the construction of desalination plants, power generators and sewerage plants on the islands. New infrastructure to upgrade telecommunication facilities to accommodate electronic communication as in e-commerce is crucial. On some islands, specialised piling work, harbour dredging and reclamation work may have to be carried out. In addition, a unique transportation network, linking the various Growth Regions throughout Maldives as well as intra-region linkages among all the islands in the Growth Regions, have to be established to transport tourists, local people and food supplies between/among islands.

As part of the longer-term recommendations, the consulting team has highlighted some broad but critical supporting policy areas which will reinforce the overall competitiveness and efficiency of the economy. These areas include (i) human resources development to ensure the availability of a pool of trained Maldivians to undertake skilled jobs, (ii) institutional capacity building and strengthening to equip government agencies for sectoral development and promotion, and (iii) strengthening international and regional relationships with major trade/investment partners.
The recommendations set out in this SEP will help Maldives reduce the volatility and vulnerability of the economy in its current stage.

• Within the fisheries sector, diversification into other high-value marine products, high-value secondary production to produce high value products for niche markets and new activities will reduce volatility arising from the fluctuating market price of skipjack tuna.

• Similarly for tourism, diversification into new tourism products will attract new groups of visitors as well as tourists from other geographical regions.

• The upgrading and expansion of the agricultural sector will help Maldives save foreign exchange and attain greater self-sufficiency in essential food supplies. In addition, many women who are currently not economically active can participate in productive occupations in the agricultural sector.

• The growth of these traditional clusters will also generate more alternative job opportunities such as aquaculture, marine and agriculture research, diving specialists, resort development and management. This pool of ready expertise can eventually offer their services to other island economies.

• Facilitate the expansion of the traditional sectors and the diversification into new economic sectors not only around the central region of ‘Male’, but also in the Northern and Southern Growth Regions currently being developed. Such development is wholly congruent with the current Population and Development Consolidation Programme.

By capitalising on the expansion of traditional economic clusters namely tourism, agriculture and fisheries, Maldives will branch out into other new economic clusters - PLS, ICT and OFC. These new clusters will complement the traditional ones to ensure stability and sustainability of the whole Maldives’ economy.

Economic success will enable Maldives to be acknowledged internationally as a model island economy that is able to attain economic progress while maintaining its ecological balance. As a model island economy,

• Maldives will be in a better position to attract funding from International Development Agencies (IDAs) and bilateral donors for economical cum eco-friendly projects. The IDAs will also be more forthcoming to offer project and technical assistance to Maldives as the country has demonstrated an ability to maintain a high standard of environment protection.
• The successful management of the economy will also create confidence in foreign investors who will be attracted to invest in new and profitable niche areas.

• Maldives can further capitalise on this favourable international reputation and core competency in the management of island economy to export consulting, training and advisory services to other island economies.
Chapter 1

Introduction
CHAPTER 1 – INTRODUCTION

TERMS OF REFERENCE

The Government of Maldives appointed the International Trade Institute of Singapore (ITIS) in October 2000 to develop the Strategic Economic Plan for the country. The Terms of Reference (TOR) for Phase 1 of this project is as follows:

- Review and analyse Maldives’ economic structure to identify key economic sectors and drivers, their respective opportunities and threats as well as their medium term sustainability.

- Formulate appropriate national policies and strategies towards achieving rapid economic growth, given the current economic situation.

- Identify potential areas for diversification with linkages to major industry.

FRAMEWORK OF STUDY

The first objective of this project phase is to review and analyse Maldives’ existing economic structure so as to identify the strengths, areas of developmental concerns and the sustainability of various economic sectors. The analysis of the economic structure is based on quantitative information in published reports and data that were gathered during the face-to-face discussions with the various participants in field trips undertaken for this project.

While an important focus of the project is to meet the third objective of identifying new areas for economic diversification, the consulting team also surveyed how the existing core sectors, namely tourism and fisheries, can be strategically positioned and further expanded to generate more economic spin-offs for Maldives in the next 20 years.

In recommending appropriate national policies and strategies to be formulated, the consulting team has taken into account Maldives’ existing strengths and areas of developmental concern to:

(i) Strengthen the growth of the economy by further developing traditional sectors which need expansion and upgrading;
(ii) Diversify into new economic sectors which have the potential to grow in Maldives;
(iii) Improve on areas of concerns identified in the economy over a period of 20 years;
Facilitate the expansion of the traditional sectors and the diversification into new economic sectors not only around the central region of Male', but also in the Northern and Southern Growth Regions currently being developed.

The structure of recommendations is categorised by short-term, medium-term and long-term\(^1\) time frames to allow policy-makers to implement them by these stages. These recommendations serve to lay a solid foundation and a conducive environment to enable the relevant authorities to formulate policies and strategies towards achieving rapid and sustainable economic growth in the longer term.

In the process of conducting the study, the consulting team constantly referred to the strategic thrusts in Vision 2020 envisaged by His Excellency, the President of the Republic of Maldives. This is to link the proposed positioning and development of the various economic sectors in a holistic and integrated way to achieve the economic, human resource and technology thrusts set out in the Vision.

**METHODOLOGY**

Beginning with an assessment of the strengths and areas of developmental concerns of the prevailing economic structure, the consulting team undertook a study of both the public and private sectors to determine the strengths, areas of concerns, potential opportunities and threats faced by the respective participants in various economic sectors. The study identified the important role of the public sector vis-à-vis the private sector in economic development by balancing the views and perspectives of the private sector with those of the generally broader and longer-term objectives and perspectives of the public agencies. The list of participants interviewed and contributed information and data for the study is listed in Annex 1.

Secondly, past economic plans and studies conducted for the Republic of Maldives were reviewed to identify the rationale and economic goals behind the various proposals. A list of the plans and studies reviewed is enclosed in Annex 2.

Thirdly, supportive and generic policy evaluation was conducted to specify the human resource development (HRD) implications and financial requirements including the fiscal system, to achieve the areas of sustainable economic growth recommended.

Several assumptions that are inherent in this study are as follows:

- Vision 2020 statements as enunciated by His Excellency, the President of the Maldives, serve as the guiding principles of this study.

\(^1\) **Short-term**: Within five years; **Medium-term**: Between five to ten years; **Long-term**: More than ten years.
• The existing pool of quantitative data and feedback received from the participants provided a valid and reliable base for meaningful analysis, for purpose of the Phase 1 study.

• Assessment of economic benefits generated by an economic sector for Maldives is based on a sector’s existing contribution to foreign exchange earning, government revenue and employment creation as well as how the sector can be upgraded and expanded to continue this contribution.
OVERVIEW OF THE ECONOMY

Maldives’ economy is driven by, and is dependent on four economic sectors. The two major sectors, namely tourism and fisheries sectors, are contributing significantly to the economy, while the agriculture sector has been decreasing its relative contribution to Gross Domestic Product (GDP) in recent years. The future of the garment sector is not clear in the short to medium term in view of the impending phasing out of the Import Textile Quotas System by 2005.

ECONOMIC STRUCTURE

Table 1-1: Broad Economic Indicators, 1995 - 2000

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</tr>
</thead>
<tbody>
<tr>
<td>GDP at 1995 constant basic price (US$ million)</td>
<td>364.4</td>
<td>397.6</td>
<td>437.9</td>
<td>473.7</td>
<td>508.8</td>
<td>533.4</td>
</tr>
<tr>
<td>Real GDP Growth (%)</td>
<td>7.8</td>
<td>9.1</td>
<td>10.2</td>
<td>8.2</td>
<td>7.4</td>
<td>4.8</td>
</tr>
<tr>
<td>Consumer price inflation (av; %)</td>
<td>5.5</td>
<td>6.2</td>
<td>7.6</td>
<td>-1.4</td>
<td>3.0</td>
<td>1.09</td>
</tr>
<tr>
<td>Current account balance (US$ million)</td>
<td>-18.2</td>
<td>-7.5</td>
<td>-34.2</td>
<td>-23.3</td>
<td>-81.6</td>
<td>-247.1</td>
</tr>
<tr>
<td>Overall public finance surplus/deficit (US$ million)</td>
<td>-23.9</td>
<td>-9.6</td>
<td>-5.5</td>
<td>-5.1</td>
<td>-21.5</td>
<td>3.6</td>
</tr>
<tr>
<td>Reserves (US$ million)</td>
<td>52.06</td>
<td>73.05</td>
<td>99.74</td>
<td>114.40</td>
<td>131.97</td>
<td>-</td>
</tr>
<tr>
<td>Exchange rate (av; MRF:US$)</td>
<td>11.77</td>
<td>11.77</td>
<td>11.77</td>
<td>11.77</td>
<td>11.77</td>
<td>11.77</td>
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Source: Maldives Monetary Authority and Ministry of Planning and National Development

2 Projections
Table 1-2: Contribution to Gross Domestic Product

<table>
<thead>
<tr>
<th>In 1995 constant price</th>
<th>% of GDP, 1995</th>
<th>% of GDP, 1996</th>
<th>% of GDP, 1997</th>
<th>% of GDP, 1998</th>
<th>% of GDP, 1999</th>
<th>% of GDP, 2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary Sector</td>
<td>12.1 11.3 10.5</td>
<td>10.4 10.0 9.3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agriculture</td>
<td>3.6  3.4  3.2</td>
<td>3.2  2.8  2.8</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fisheries</td>
<td>7.8  7.3  6.7</td>
<td>6.7  6.5  6.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coral and sand mining</td>
<td>0.7  0.6  0.7</td>
<td>0.7  0.7  0.6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Secondary Sector</td>
<td>13.2 12.5 14.1</td>
<td>15.1 15.2 14.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manufacturing (incl. Electricity &amp; water)</td>
<td>10.1 9.8 10.8</td>
<td>11.3 11.5 11.8</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Construction</td>
<td>3.1  2.7  3.3</td>
<td>3.8  3.7  2.7</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tertiary Sector</td>
<td>74.7 76.2 75.5</td>
<td>74.6 74.8 76.3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Distribution</td>
<td>5.5  5.2  5.0</td>
<td>4.8  4.6  4.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transport &amp; communications</td>
<td>11.1 12.4 13.0</td>
<td>14.5 15.2 15.7</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tourism</td>
<td>34.4 34.9 34.0</td>
<td>33.2 33.1 33.3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Real estate 1_/</td>
<td>9.1  8.8  8.4</td>
<td>8.2  8.0  7.8</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Services</td>
<td>9.4  9.2  8.9</td>
<td>8.8  8.6  8.4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Government administration</td>
<td>9.3  9.7 10.4</td>
<td>10.6 11.3 12.3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial services indirectly measured(Fisim)</td>
<td>-4.1  -4.0  -4.3</td>
<td>-5.7  -6.1  -5.9</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Ministry of Planning and National Development

1_/ Imputed rent of owner-occupied dwellings is included in real estate.

Chart 1-1: GDP Contributions by Primary, Secondary & Tertiary Sectors

2 Projections
The GDP of Maldives has supported relatively robust per capita income and development but it is generally narrow-based and the overall rate of growth is on the decline. GDP growth has decreased from 10.2% in 1997 and to 7.4% in 1999, and is projected to further decline to 4.8% in 2000. This lower rate of growth is attributed mainly to the relative decline in the agriculture and fisheries (mainly tuna) sectors. The combined GDP contribution of the two sectors has declined from 11.4% in 1995 to 8.8% in 2000. The diminishing roles of the two sectors could have also led to the declining role of the distribution sector, whose contribution to Maldives’ GDP has fallen from 5.5% in 1995 to 4.5% in 2000.

It is also noted from Chart 1-1 that the primary sector contribution to GDP has declined in relation to the secondary and tertiary sectors. The decline in agriculture is evidenced from the fall of 0.8% in contribution to national GDP from 3.6% in 1995 to 2.8% in 2000. The primary harvesting of fisheries faced similar decline relative to other sectors. However, secondary production in fisheries, which was accounted as manufacturing under GDP statistics, showed positive growth from 9.2% in 1998 to 10.5% in 1999. The contribution of tourism to national GDP, on the other hand, has been consistent at more than 33%. However, its growth has been marginal over the past five years. There is, therefore, scope to upgrade and expand these sectors to generate greater growth for Maldives.

The manufacturing and utility (including electricity generation and water distribution) sectors contributed an average of 6.8% to GDP between 1996 and 1999. Fish canning, other high-value fish exports such as yellowfin tuna and grouper exports and garment manufacturing are major activities in the manufacturing sector. Secondary production in fisheries has contributed significantly to growth in the manufacturing sector. As for garment manufacturing, despite contributing somewhat to the overall GDP, there are several areas of developmental concerns in the sector. Specifically, the sector employs mainly foreign workers, contributes 3% royalty to government revenue and faces substantial economic leakage from repatriated incomes and remittances of earnings by foreign investors who own practically all the garment factories. Furthermore, with the phasing out of the import quotas for textile products in 2005, the garment manufacturers are likely to shift their operations out of Maldives.

The Government may need to explore other ways to finance a number of the recommendations in this study if they are adopted. The current deficit public finance situation, which stood at US$21.5 million in 1999, may not be able to support the funding required. Hence, it is important for the Government to find new sources to fund the recommendations that serve to lay the necessary infrastructure for the economic takeoff.
### Table 1-3: Government Current Revenues (US$ millions), 1998 – 2000

<table>
<thead>
<tr>
<th></th>
<th>1998</th>
<th>%</th>
<th>1999</th>
<th>%</th>
<th>2000 (provisional)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Current revenue (tax + non-tax revenue)</td>
<td>155.52</td>
<td>100.00</td>
<td>180.83</td>
<td>100.00</td>
<td>199.41</td>
<td>100.00</td>
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<tr>
<td>Tax revenue</td>
<td>76.69</td>
<td>49.31</td>
<td>83.03</td>
<td>45.92</td>
<td>88.42</td>
<td>44.34</td>
</tr>
<tr>
<td>Import duties</td>
<td>48.98</td>
<td>31.49</td>
<td>53.40</td>
<td>29.53</td>
<td>56.33</td>
<td>28.25</td>
</tr>
<tr>
<td>Tourism tax</td>
<td>21.89</td>
<td>14.08</td>
<td>23.45</td>
<td>12.97</td>
<td>24.98</td>
<td>12.52</td>
</tr>
<tr>
<td>Bank profit tax</td>
<td>3.00</td>
<td>1.92</td>
<td>3.58</td>
<td>1.98</td>
<td>3.98</td>
<td>2.00</td>
</tr>
<tr>
<td>Others 1_/</td>
<td>2.81</td>
<td>1.81</td>
<td>2.61</td>
<td>1.44</td>
<td>3.12</td>
<td>1.56</td>
</tr>
<tr>
<td>Nontax revenue</td>
<td>78.83</td>
<td>50.69</td>
<td>97.80</td>
<td>54.08</td>
<td>110.99</td>
<td>55.66</td>
</tr>
<tr>
<td>State Trading Organisation</td>
<td>3.40</td>
<td>2.19</td>
<td>8.17</td>
<td>4.52</td>
<td>7.42</td>
<td>3.72</td>
</tr>
<tr>
<td>Maldives Electricity Board /STELCO</td>
<td>2.29</td>
<td>1.48</td>
<td>1.70</td>
<td>0.94</td>
<td>2.97</td>
<td>1.49</td>
</tr>
<tr>
<td>Dhiraagu</td>
<td>4.22</td>
<td>2.72</td>
<td>4.70</td>
<td>2.60</td>
<td>5.71</td>
<td>2.86</td>
</tr>
<tr>
<td>Maldives Posts Limited</td>
<td>0.42</td>
<td>0.27</td>
<td>0.47</td>
<td>0.26</td>
<td>0.78</td>
<td>0.39</td>
</tr>
<tr>
<td>Maldives Monetary Authority</td>
<td>5.38</td>
<td>3.46</td>
<td>5.52</td>
<td>3.05</td>
<td>5.78</td>
<td>2.90</td>
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<td>0.00</td>
<td>0.00</td>
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<td>MTCC</td>
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<td>0.11</td>
<td>0.22</td>
<td>0.12</td>
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<td>0.12</td>
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<td>Maldives Port Authority</td>
<td>1.70</td>
<td>1.09</td>
<td>2.55</td>
<td>1.41</td>
<td>2.55</td>
<td>1.28</td>
</tr>
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<td>Bank of Maldives</td>
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<td>0.25</td>
<td>0.42</td>
<td>0.23</td>
<td>0.42</td>
<td>0.21</td>
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<tr>
<td>Maldives Airport Authority</td>
<td>3.82</td>
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<td>3.52</td>
<td>7.97</td>
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<td>Printing Section</td>
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<td>0.03</td>
<td>0.08</td>
<td>0.05</td>
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<td>0.12</td>
</tr>
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<td>Government Hotels</td>
<td>0.20</td>
<td>0.13</td>
<td>0.20</td>
<td>0.11</td>
<td>0.21</td>
<td>0.11</td>
</tr>
<tr>
<td>Maldives Inflight Catering Services</td>
<td>1.02</td>
<td>0.66</td>
<td>1.02</td>
<td>0.56</td>
<td>1.02</td>
<td>0.51</td>
</tr>
<tr>
<td>Maldives Water &amp; Sewerage Company</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.57</td>
<td>0.29</td>
</tr>
<tr>
<td>Lease &amp; rents of Government Property</td>
<td>24.86</td>
<td>15.98</td>
<td>32.05</td>
<td>17.72</td>
<td>36.92</td>
<td>18.52</td>
</tr>
<tr>
<td>Transport services</td>
<td>0.14</td>
<td>0.09</td>
<td>0.10</td>
<td>0.06</td>
<td>0.10</td>
<td>0.05</td>
</tr>
<tr>
<td>Capital Revenue</td>
<td>0.18</td>
<td>0.11</td>
<td>0.34</td>
<td>0.19</td>
<td>0.30</td>
<td>0.15</td>
</tr>
<tr>
<td>Others 2_/</td>
<td>30.14</td>
<td>19.38</td>
<td>33.88</td>
<td>18.74</td>
<td>37.77</td>
<td>18.94</td>
</tr>
</tbody>
</table>

1_/ Includes licence fees, company registration, Stamp duties and royalties.
2_/ Excludes grants for direct expenditure by donors.

Source: Ministry of Finance and Treasury
In terms of contribution to government current revenues, the tourism sector is the most important. In 1999, the total receipts\(^3\) from tourism, which include tourism and airport taxes plus lease rents and resort land rents, was US$52.75 million.

On the other hand, contribution by Maldives' Industrial Fisheries Company (MIFCO) to the government revenue was minimal in recent years because of business difficulties and unfavourable external tuna market conditions. However, contribution to government revenue from royalties in different fisheries such as foreign licensed fisheries [Exclusive Economic Zone (EEZ) fisheries], Yellowfin tuna and live aquarium fish fisheries has increased over recent years. In 1998, MIFCO contributed US$0.42 million or 0.28% of total government current revenue. While MIFCO’s total production increased from 1998 to 2000, as did the volume of its exports, the value earned from these exports decreased due to weak external tuna prices. The decline in prices in 1999 and the sustained decline in 2000 hit all major varieties of fish exports, especially frozen non-reef fish, which in recent years accounted for about 40% of fish export earnings. This was despite an increase in the export volume of frozen non-reef fish by 70% during 1999. Given the dependence on external prices and the impact on the economy and sector during periods of weak external prices for tuna, there is a need to look into how the fisheries sector can be upgraded and/or restructured to broaden and diversify the sector and hence, generate more revenues for the Government on a sustained basis.

\(^3\) Source: Ministry of Finance & Treasury. Tourism receipts from tourism include tourism and airport taxes plus resort lease rents and resort land rents.
TRADE STRUCTURE

Table 1-4: Broad Trade Indicators

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Domestic exports (US$ million)</td>
<td>49.6</td>
<td>59.2</td>
<td>73.2</td>
<td>74.3</td>
<td>63.7</td>
</tr>
<tr>
<td>Re-exports (US$ million)</td>
<td>35.4</td>
<td>20.8</td>
<td>19.7</td>
<td>21.3</td>
<td>27.8</td>
</tr>
<tr>
<td>Imports (US$ million)</td>
<td>-235.8</td>
<td>-265.5</td>
<td>-307.0</td>
<td>-311.5</td>
<td>-353.9</td>
</tr>
<tr>
<td>Trade balance (US$ million)</td>
<td>-150.8</td>
<td>-185.6</td>
<td>-214.5</td>
<td>-215.9</td>
<td>-262.4</td>
</tr>
<tr>
<td>Services receipts (US$ million)</td>
<td>237.3</td>
<td>295.0</td>
<td>319.7</td>
<td>339.9</td>
<td>351.8</td>
</tr>
<tr>
<td>Services payments (US$ million)</td>
<td>-101.2</td>
<td>-115.8</td>
<td>-129.1</td>
<td>-135.6</td>
<td>-148.2</td>
</tr>
<tr>
<td>Net total services (US$ million)</td>
<td>136.1</td>
<td>179.2</td>
<td>190.5</td>
<td>204.3</td>
<td>203.6</td>
</tr>
</tbody>
</table>

Source: Maldives Customs Services and Ministry of Planning and National Development

Table 1-5: Maldives’ Major Trade Partners

<table>
<thead>
<tr>
<th>Main destinations of exports, 1999</th>
<th>Percentage of total exports</th>
<th>Main importing countries, 1999</th>
<th>Percentage of total imports</th>
</tr>
</thead>
<tbody>
<tr>
<td>USA</td>
<td>45.39</td>
<td>Singapore</td>
<td>25.54</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>18.28</td>
<td>European Union</td>
<td>9.72</td>
</tr>
<tr>
<td>Thailand</td>
<td>5.76</td>
<td>Sri Lanka</td>
<td>13.55</td>
</tr>
<tr>
<td>Germany</td>
<td>9.88</td>
<td>United Arab Emirates</td>
<td>8.47</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>7.43</td>
<td>India</td>
<td>9.17</td>
</tr>
<tr>
<td>Japan</td>
<td>4.28</td>
<td>Malaysia</td>
<td>12.47</td>
</tr>
<tr>
<td>Taiwan</td>
<td>1.21</td>
<td>Indonesia</td>
<td>3.02</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>3.35</td>
<td>Japan</td>
<td>3.39</td>
</tr>
<tr>
<td>Singapore</td>
<td>4.42</td>
<td>Thailand</td>
<td>3.35</td>
</tr>
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</table>

Source: Maldives Customs Services
Table 1-6: Maldives Exports and Imports

<table>
<thead>
<tr>
<th>Principal exports (US$ million)</th>
<th>1998</th>
<th>%</th>
<th>1999</th>
<th>%</th>
<th>2000</th>
<th>%</th>
<th>Principal imports (US$ million)</th>
<th>1999</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marine products</td>
<td>56.71</td>
<td>76</td>
<td>38.95</td>
<td>61</td>
<td>40.92</td>
<td>54</td>
<td>Machinery &amp; mechanical appliances</td>
<td>85.61</td>
<td>21.29</td>
</tr>
<tr>
<td>Apparel &amp; clothing</td>
<td>17.84</td>
<td>23</td>
<td>24.88</td>
<td>39</td>
<td>35.16</td>
<td>46</td>
<td>Prepared foodstuffs &amp; beverages</td>
<td>36.18</td>
<td>9.00</td>
</tr>
<tr>
<td>Scrap metals</td>
<td>0.07</td>
<td>-</td>
<td>0.11</td>
<td>-</td>
<td>0.11</td>
<td>-</td>
<td>Textile &amp; textile articles</td>
<td>36.16</td>
<td>8.99</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Vegetable products</td>
<td>31.17</td>
<td>7.75</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Vehicles, aircrafts and parts</td>
<td>26.40</td>
<td>6.56</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Base metal &amp; articles</td>
<td>23.51</td>
<td>5.85</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Live animals; animal products</td>
<td>23.35</td>
<td>5.81</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Products of the chemical &amp; allied industries</td>
<td>18.13</td>
<td>4.51</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Plastics &amp; rubber</td>
<td>10.30</td>
<td>2.56</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Wood &amp; wood articles</td>
<td>15.54</td>
<td>3.62</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Others</td>
<td>96.81</td>
<td>24.07</td>
</tr>
<tr>
<td>Total</td>
<td>74.62</td>
<td>100</td>
<td>63.94</td>
<td>100</td>
<td>76.19</td>
<td>100</td>
<td>Total</td>
<td>402.16</td>
<td></td>
</tr>
</tbody>
</table>

Source: Maldives Customs Services

Table 1-7: Export of Marine Products, 1998 & 1999

<table>
<thead>
<tr>
<th></th>
<th>Values (US$ '000) (1998)</th>
<th>% of total marine product exports</th>
<th>Values (US$ '000) (1999)</th>
<th>% of total marine product exports</th>
<th>Values (US$ '000) 2000</th>
<th>% of total marine product exports</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canned fish</td>
<td>16721</td>
<td>29.49</td>
<td>8624</td>
<td>22.14</td>
<td>10796</td>
<td>26.38</td>
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<tr>
<td>Dried tuna</td>
<td>9198</td>
<td>16.22</td>
<td>9043</td>
<td>23.22</td>
<td>10863</td>
<td>26.55</td>
</tr>
<tr>
<td>Fresh or chilled tuna</td>
<td>6121</td>
<td>10.79</td>
<td>1140</td>
<td>2.93</td>
<td>5366</td>
<td>13.11</td>
</tr>
<tr>
<td>Frozen tuna</td>
<td>17013</td>
<td>30.00</td>
<td>12353</td>
<td>31.72</td>
<td>4579</td>
<td>11.19</td>
</tr>
<tr>
<td>Total (from tunas)</td>
<td>49053</td>
<td>86.5</td>
<td>31160</td>
<td>80.01</td>
<td>31604</td>
<td>77.23</td>
</tr>
<tr>
<td>Fishmeal</td>
<td>1326</td>
<td>2.34</td>
<td>1344</td>
<td>3.45</td>
<td>805</td>
<td>1.97</td>
</tr>
<tr>
<td>Live reef fish</td>
<td>2309</td>
<td>4.07</td>
<td>1953</td>
<td>5.01</td>
<td>1998</td>
<td>4.88</td>
</tr>
<tr>
<td>Fresh or chilled reef</td>
<td>640</td>
<td>1.13</td>
<td>1974</td>
<td>5.07</td>
<td>1750</td>
<td>4.28</td>
</tr>
<tr>
<td>Salted dried fish</td>
<td>2388</td>
<td>4.21</td>
<td>1431</td>
<td>3.68</td>
<td>699</td>
<td>1.71</td>
</tr>
<tr>
<td>Other marine products</td>
<td>645</td>
<td>1.14</td>
<td>679</td>
<td>1.74</td>
<td>1631</td>
<td>3.99</td>
</tr>
<tr>
<td>Total</td>
<td>56707</td>
<td>100.00</td>
<td>38948</td>
<td>100.00</td>
<td>40922</td>
<td>100.00</td>
</tr>
</tbody>
</table>

Source: Maldives Customs Services
Maldives’ exports, by value, decreased by 14.2% in 1999, from US$74.3 million in 1998 to US$63.7 million (Table 1-4). This decline was attributed to the sustained fall in external market prices of its major marine product exports and hence value earned, which represented 61% of Maldives’ total exports by value in 1999 (Table 1-6). The relatively narrow export base relying mainly on marine products has rendered Maldives economically vulnerable to external market shocks. This situation is aggravated by the fact that the bulk of the marine product exports from Maldives are tuna and tuna products (skipjack and yellowfin tunas). In 1998 and 1999, tuna products represented a significant 86% and 80% respectively of total marine product exports. In 2000, the estimated percentage was 77% of total marine product exports. (Table 1-7). High value yellowfin tuna exports, nearly four times by value of skipjack products represented about 11% of this total.

The fluctuating trend of export price of tuna in Chart 1-2 below demonstrates the vulnerability of Maldives exports because of its reliance on skipjack tuna exports. In 1997, a ton of tunas size over 2 kg could fetch US$1,076 while in 1999 it fetched only US$634. This adverse impact was felt by Maldives in 1999, when the values of the marine exports declined by 31%, from US$56.71 million to US$38.95 million, despite a fall of only 11% in export volume, from 71,000 metric tons to 63,000 metric tons between 1998 and 1999.

Referring to Table 1-7, the consulting team also notes that there was an incipient increase in the exports of other non-tuna products (as a percentage of total marine product exports) in particular, reef fish between 1998 and 2000. There are, therefore, opportunities for Maldives to find ways to alleviate the market risk arising from reliance on tuna, by diversifying into other marine products in a sustainable manner. Maldives also has opportunities to diversify into high value tuna products such as yellowfin tuna products given rising external demands for substitute products for meat and poultry products. In addition, it can diversify its markets by diversifying into value-added production, targeting niche markets.
• 39% of the total exports from Maldives in 1999 were apparels. However, with the phasing out of import quotas for textile products by 2005, the prospect for the sector is not clear. In the event that garment manufacturers shift their operations elsewhere, Maldives’ export base will comprise almost 100% marine products. The decline of the garment sector may also result in loss of jobs for the estimated 400 Maldivians who are currently employed in the sector. While these statistics still do not argue for preserving the garment sector given its low contribution to the domestic economic, they do reinforce the importance of diversifying into other types of exports for Maldives.

• Maldives imported US$31.2 million worth of vegetable products, which constituted 7.75% of total imports in 1999. This suggests that there are opportunities for Maldives to take positive steps to expand the existing agricultural sector for farming of high-value vegetables and fruit products to save foreign exchange as well as to provide alternative occupations for Maldivians who are currently not economically active. These are not strictly import-substituting suggestions to protect the local agricultural sector which must also improve its productivity.

• Maldives’ key export markets are fairly well distributed globally. Key trade partners are the USA, Germany and the United Kingdom and Asian partners namely Sri Lanka, Thailand, Japan, Taiwan, Hong Kong and Singapore. Marine products are the main exports to European countries and other parts of the world, while the bulk of exports to the USA are garment products. Having established trade relationships with these countries, there are opportunities for Maldives to further capitalise on these linkages for economic development. An area which Maldives can collaborate with these trade partners, is the
establishment of joint ventures between companies from these trading partners and local companies to invest in value-added production in fisheries and aquaculture activities in Maldives. Joint research with these countries can also be undertaken to develop new breeds of marine resources.
VISON 2020

As enunciated by His Excellency, the President of Maldives in his Vision 2020 statement, the consulting team identified three important thrusts in the vision. Specifically,

**Economic thrust:** Maldives is to become one of the top-ranking nations amongst middle-income developing countries by 2020.

**Human resources thrust:** There will be extensive development of higher-level skills and core competency among the people.

**Technology thrust:** Modern technology is to be employed to facilitate continued progress and to provide modern conveniences to the people. It will become part of the socio-economic process, not just a tool of economic growth and development.

DEVELOPMENT GAP ANALYSIS

The current economic structure of Maldives is dominated by the tourism and fisheries sectors. Export markets for marine products are fairly global but export growth is constrained by the limited range of products and fluctuating external market prices for the major products. The analysis of the existing economic structure suggests that there are several areas that can be improved to enable Maldives to progress from its current economic position to that envisaged in Vision 2020. Specifically,

• Maldives’ limited domestic market and narrow economy imply that economic activities are driven mainly by the tourism and fisheries sectors, specifically tuna products. This certainly posts substantial risks in the path towards achieving Vision 2020. For tourism, Maldives needs to explore new trajectory of growth in terms of diversifying the source markets geographically and product mix. For fisheries, Maldives needs to diversify into a more varied fisheries sector, based on sustainable use of resources, while focusing on production of value-added products for niche markets. Furthermore, it needs to exploit the market value for sustainable fishing methods and environmentally friendly products through “eco” labelling. For export growth, there is a need to diversify into other types of products and services.

• There is also a strong need to diversify into new economic sectors to earn more foreign exchange e.g. commercial port and logistics activities. At the same time, appropriate measures to save foreign exchange e.g. upgrading and expansion of agricultural activities will be useful.

• Tourism and fisheries sectors are key drivers of other economic activities namely transport
& communications, distribution, construction and real estate. For instance, the growth of the tourism sector will generate additional construction activities. Besides the construction of more tourist resorts on islands, such projects also involve construction of desalination plants, power generators and sewerage plants on the islands. On some islands, specialised piling work, harbour dredging and reclamation work also have to be carried out. The types of construction activities related to island resorts development in Maldives are deemed to be very unique because of the small land mass on each island and the need for all these islands to be self-sufficient. Diversification of fisheries into high-value species and expansion of the sector will increase the spending power of rural communities, thereby driving rural development and investments into other economic sectors such as construction, trade and transport. It is important for Maldives to continue to upgrade these supporting sectors, particularly in the adoption of new technology, to support the growth of the core economic sectors.

- The twin pillars of tourism and fisheries sector and their spin-off activities namely, training and some manufacturing activities at their current growth rates may have difficulties providing sufficient job opportunities for the 4,600 school leavers who are expected to enter the job market this year. On the other hand, about 26,000 expatriate workers are currently employed in Maldives and only 10-15% of these constitute skilled labour such as Food & Beverage managers, chefs in resorts and general management staffs. This suggests that there is scope to train and upgrade the skills of local labour to eventually take over the skill-intensive jobs currently performed by foreign workers.

- Current economic development in Maldives is geographically concentrated in the central region in and around Male’. With the development of the Northern and Southern Growth Centres, it is important to (i) also speed up the development of the traditional sectors, particularly tourism in these Growth Regions as well as (ii) ensuring that the diversification and development of new economic pillars fit into the overall development of these regions.

- According to feedback received during the first study trip in November 2000, only 8% of school leavers have registered for official employment. This suggests under-utilised domestic manpower and wastage of foreign exchange on imported labour. Steps can be taken to encourage the younger generation to have more positive work attitude through early career planning and development. The low overall labour force participation of some 47% will be enhanced by attracting such new recruits into the labour market rather than them absorbed in a haphazard fashion in the informal sectors. Strategic Human Resource Development (HRD) and Human Resource Management (HRM)

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4 Figure quoted by the Ministry of Human Resources, Employment and Labour.
policies can only be implemented through a more conscious labour market development policy.

• In order to develop greater skills and core-competency among the people, the consulting team acknowledges the differences in the skills possessed by those who are more adaptable to the new economy and those who prefer jobs in the traditional sector. The consulting team envisaged that sectors such as ICT and financial sectors would demand those who are generally more inclined towards the new economy. The expansion and upgrading of the traditional economies, however, will provide pockets of opportunities for those who prefer and possess traditional skills. Specifically, they can be further trained to take up jobs such as diving, handicraft making, vegetables and fruits farming, aquaculture activities as well as using new technology to enhance productivity in these sectors.

• The labour force participation rate of the female population stood at a low 32%\(^5\) in 2000. More efforts can be made to encourage more females to participate in economic activities. For instance, females who are not economically active presently, can be provided focused training programme to enable them to undertake more home-based farming activities to grow crops to meet families' consumption needs. They can also be trained to take up aquaculture, home-based garment and handicraft-making to earn extra incomes.

• To upgrade the manpower skills and encourage wider adoption of technology, the Government needs to play a strong facilitating role to establish the conditions and infrastructure for the dissemination and adoption of technology and training. The technology and training must also be affordable if not subsidised. One of the principal areas that the Government can play a strong facilitating role is the review and enhancement of existing school curriculum and training programmes in the vocational institutes so as to offer practical training that meet the manpower needs of the core economic clusters.

• A quick stock take of existing IT application in Maldives shows positive and encouraging trends:

- Basic IT module is already part of the existing education syllabus and there are private schools in Male’ providing IT training.
- IT applications such as word processing, Internet and electronic mail are extensive within the government ministries and among companies.
- There are a number of indigenous software houses and individuals who develop customised software for local businesses.

There are opportunities to further build up a sound ICT infrastructure and promote widespread use of ICT in Maldives. The Science & Technology Master Plan, which is currently being developed by the Ministry of Science and Technology, can set a national direction and outline a holistic approach for the adoption of technology in Maldives.

- The high cost of utilities - electricity and telecommunication, however, is a barrier to the efficient employment of ICT efficiently in enterprises. This will hinder the strategic thrust of widespread use of technology to enhance productivity and competitiveness. The consulting team’s findings during the study trips have suggested that the primary reason for the high utility costs is the lack of competition in the utilities supply markets while the high capital investment factor has become less important over the years as initial investments have been recovered. Hence, effective measures need to be adopted to lower the high electricity and telecommunication charges.
Chapter 2

Existing Situation in Maldives
CHAPTER 2 – EXISTING SITUATION IN MALDIVES

INTRODUCTION

This chapter provides an overview of the strengths and areas of developmental concerns inherent in Maldives’ existing economic sectors. Maldives can capitalise on these strengths while minimising the more vulnerable areas to progress towards Vision 2020.

GENERAL STRENGTHS

As a developing island economy, Maldives has some nascent distinctive and progressive characteristics. The most intrinsic characteristic, which constitutes both its strength and opportunity, is the way it has developed as an environmentally friendly and moral political economy. In the agricultural and fisheries sectors, Maldives boasts of clean and green water and sustainable resource utilisation.

Conscientious efforts to protect and conserve the environment have paid off and today, Maldives is held in high regards internationally for its green and well-conserved environment. Development of the economy is also based on principles of moral political economy in terms of looking after the welfare and interests of the people by the administration without compromising on environment protection and integrity of values, religious and cultural traditions. This clean and moral political economy translated into social cohesion and stability, which is not common in many developing countries is an enduring comparative advantage and competitive strength in the long run. Today, even developed countries are struggling to protect and conserve their marine and ecological environment.

A very stable country politically and socially, is also important for business. Maldives provides an environment that is favourable to expand the scope for international business activities. Such stability will also enable the Government to take a long-term view by investing in infrastructures and training of human resources.

Another distinctive strength of Maldives is its steady accumulation of a wealth of techniques in aqua, marine science, technology, human skills and expertise. Without even being consciously nurtured, Maldivian fishing methods, boat making craft and other local knowledge, technologies and practices have proven to be superior in their own rights, while being economically profitable and environmentally friendly by current world standards. Properly developed and researched further henceforth, the potential of such accumulated learning, experience and methods can be packaged as a unique island economy model of growth and development. This can be the basis for the export of specialist knowledge and services in the future.
EXISTING STATUS OF KEY ECONOMIC SECTORS

Tourism Sector

Maldives tourism sector has seen rapid progress. With 30 years of development, Maldives has attracted close to half a million of tourists in 1999, which is about double the size of her population. The number of tourist arrivals grew two-fold from 212,800 in 1992 to more than 430,000 in 1999. Bed capacity in Maldives expanded accordingly, from 8,500 in 1992 to more than 15,000 in 1999. The tourism sector is a big employer. As in 1999, 12,124 locals (14% of local labour force) and 10,068 foreigners were employed in the sector.

The success of the tourism sector can be attributed to the following strengths:

Strengths

i) Established public-private system of operations which has proven to be quite successful - private sector concentrating on investment and management of resorts while public organisations such as Maldives Tourism Promotion Board and Maldives College of Higher Education focus on development of hard and soft infrastructures e.g. training.

ii) A naturally endowed paradise for ecological and marine tourism, with a well conserved sustainable environment.

iii) An established high standard system for protecting and conserving the environment, which is critical for sustaining the green environment and indirectly the growth of the tourism sector.

iv) Maldives has established expertise in the development and management of island resorts in an ecologically friendly way. Some of the locals have also been trained to undertake jobs in the tourism sector.

v) Existing tourism facilities such as resorts, hotels and conference facilities, which can be further enhanced for future tourism growth.

Areas of developmental concerns

There are, however, several areas of developmental concerns in the sector which will likely impede the growth of the tourism sector. These areas of concerns include:

i) While tourism generates substantial economic benefits for Maldives, it can be fragile
and volatile because of the reliance on the European tourist market. In the previous three years, increasing numbers of tourists to Maldives were from Europe, accounting for nearly 80% of the tourists in 1999. On the other hand, while many other countries are getting increasing numbers of Asian tourists, this is not the case with Maldives. Though there was an increase in absolute number, the number of Asian tourists as a percentage of the total tourists to Maldives, has declined from 19.90% in 1997 to 17.45% in 1999 (Table 2-1).

### Table 2-1: Total tourists arrivals by nationality

<table>
<thead>
<tr>
<th></th>
<th>1997</th>
<th>Percent</th>
<th>1998</th>
<th>Percent</th>
<th>1999</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Europe</td>
<td>272922</td>
<td>74.66</td>
<td>304905</td>
<td>77.05</td>
<td>340469</td>
<td>79.24</td>
</tr>
<tr>
<td>Africa</td>
<td>8074</td>
<td>2.21</td>
<td>7168</td>
<td>1.81</td>
<td>1846</td>
<td>0.43</td>
</tr>
<tr>
<td>Asia</td>
<td>72736</td>
<td>19.90</td>
<td>71738</td>
<td>18.13</td>
<td>74935</td>
<td>17.44</td>
</tr>
<tr>
<td>America</td>
<td>6101</td>
<td>1.67</td>
<td>6120</td>
<td>1.55</td>
<td>6082</td>
<td>1.42</td>
</tr>
<tr>
<td>Oceania</td>
<td>5730</td>
<td>1.57</td>
<td>5794</td>
<td>1.46</td>
<td>6334</td>
<td>1.47</td>
</tr>
<tr>
<td>Total</td>
<td>365563</td>
<td>100</td>
<td>395725</td>
<td>100</td>
<td>429666</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Ministry of Tourism

ii) Like many other tourist destinations, Maldives’ tourism sector also experiences seasonality challenge. In Maldives, the off-peak season for tourism is in the months of May, June and July every year, as highlighted in Table 2.2 below.

### Table 2-2: Monthly distribution of tourist arrivals, 1999

<table>
<thead>
<tr>
<th>Mth</th>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>Apr</th>
<th>May</th>
<th>Jun</th>
<th>Jul</th>
<th>Aug</th>
<th>Sep</th>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>42603</td>
<td>43732</td>
<td>45170</td>
<td>35817</td>
<td>26390</td>
<td>22639</td>
<td>30188</td>
<td>38738</td>
<td>34450</td>
<td>33755</td>
<td>39923</td>
<td>36261</td>
<td>429666</td>
</tr>
<tr>
<td>%</td>
<td>9.92</td>
<td>10.18</td>
<td>10.51</td>
<td>8.34</td>
<td>6.17</td>
<td>5.27</td>
<td>7.03</td>
<td>9.02</td>
<td>8.02</td>
<td>7.86</td>
<td>9.29</td>
<td>8.44</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Ministry of Tourism

iii) Substantial control of the tourism trade, investment and business are in the hands of foreigners, both resort owners and tour operators. Based on statistics compiled by Ministry of Tourism, more than 16% of the resorts were either foreign-owned or with foreign partnership while more than 30% of the resorts in Maldives were managed by foreigners in 1999. Many of the high-skilled positions such as managers, chefs and diving specialists are also filled by foreigners. There are few Maldivians in high-skill jobs, especially management and professional skills areas.

iv) Being a small island economy, Maldives has a high propensity to import. Consequently the international tourist expenditure has to be supported by substantial imports which result in “leakages” of foreign exchange. The main leakages are:
• Imports of food and other daily needs to support the international tourist expenditure.
• Remittances by the large number of expatriate workers who work in the resorts.
• Payments to service the foreign capital whether in equity or debt.

v) There is limited economic linkage between tourism and other economic sectors. For instance, many types of handicrafts such as shell souvenirs and wood sculptures sold to tourists are imported because they are presently cheaper. Many of these handicrafts are too commercialised and do not reflect the indigenous values of Maldives’ history and lifestyle like those found in locally-made handicraft such as kunaa, laa, kasabu, libaas and items made from rukufathi weaving. There is also little economic linkage between the tourism sector and the agricultural sector, despite the huge demands from tourists for fruits and vegetables. A more conscious programme to build up a competitive local handicraft industry would not only generate income and employment but also promote more spending on local handicraft, entertainment and farm produces in order to stem/reduce the leakage of foreign exchange and to achieve more sustainable economic growth.

vi) The sector is also overly reliant on marine-based tourism such as snorkeling and diving. This made it vulnerable in 1998 to the impact of environmental changes such as coral bleaching due to sustained high water temperatures, a result of El Nino. Tourist arrivals were negatively impacted by that event.

Possible Areas for Enhancement

In view of the above areas of developmental concerns in the tourism sector, the consulting team has identified several areas that will enhance the development of the tourism sector so as to enable it to contribute more towards achievement of Vision 2020. Specifically,

- **Training:**

  Maldivians who prefer jobs in traditional sectors can be trained to perform mechanical or skill-intensive jobs such as diving specialists, chefs, middle management and other resort operations. Training to inculcate a mindset change in the importance of quality service in the services economy and the right ways to deliver high quality service is also very important. In connection with this, there is a need to extend the courses offered by the vocational institutes to train those Maldivians who plan to pursue these careers in the tourism sector.

  There is also a need to concentrate on practical training of the more entrepreneurial Maldivians in the development and management of these island resorts. As
discussed previously, the development and management of resorts on islands is very different from those on vast land mass in many countries. In addition, special skills and knowledge are needed to take measures to protect the fragile ecological and marine environments, atypical of most islands. With the relevant training and experience, Maldivians can eventually go to other island countries to offer their unique services such as engineering, consulting, training and management of such resorts. In this respect, a Polytechnic or the existing Maldives’ Faculty of Hospitality and Tourism Studies, may have to be upgraded to offer such trainings.

• To sustain the high growth in the tourism sector, it is critical to broaden the base and mix of tourists and visitors through development of new markets as well as new tourist products. An optimal mix of visitors is one where there is a broad spread of (i) tourists from Europe as well as other geographical regions, (ii) a sizeable share of visitors in Maldives for business pursuits and (iii) those who go to Maldives for studies and research.

(i) In terms of geographical regions, Asian countries such as Japan, Taiwan, Korea, and Singapore are strong markets to draw high-end tourists to Maldives. Oceanic countries namely Australia and New Zealand, are also important tourist markets particularly during their winter seasons which coincide with Maldives’ off-peak season.

(ii) Potential visitors whom Maldives can also attract are students who are doing marine or ecological research and geographical studies, to make observations and conduct practical lessons in Maldives.

(iii) In recent years, increasing number of Asian companies are organising company retreats and corporate planning exercises overseas in scenic places. Maldives can attempt to expand the mix of visitors to the country by drawing more corporate visitors there for such corporate activities. Maldives can also look into establishing itself as a destination for conferences related to marine and ecological subjects, environmental protection as well as the development of small island economies.

• There is scope to enhance the linkage between the tourism sector and other key economic sectors such as fisheries, agriculture and handicraft to reduce the amount of revenue leakage. For example, tourists can be encouraged to visit selected islands which showcase local cultural dance, handicraft home industry, fish farms and local cuisines. This will provide tourists an entire package of experience to fully appreciate the culture and the way of life on an island economy.

• Development and promotion of tourism activities in the Northern and Southern Growth Regions will help speed up the development of these growth centres and ensure that
population in these growth centers can benefit economically from tourism growth. Such development would complement the current Population Consolidation Programme as economic and social benefits would be generated for the population in these Growth Regions as a result.

- New financing sources have to be secured to fund the envisaged expansion of the tourism sector. The Government can play a catalytic role in the funding of activities such as handicraft sector development, training of Maldivians and international marketing of Maldives to attract tourists. IDAs can be approached to fund environmental projects to protect the marine and ecological environment while the private sector investors will participate in commercial projects such as the development of resort and conference facilities.
Fisheries Sector

Being the biggest export and a major employment sector, the fisheries sector will continue to play a significant role for the Maldivian economy and society at large. Among the major economic sectors in the domestic economy, fisheries continues to be the most dominant in terms of employment of the local labour force, employing over 20% of this labour force. Most of the employments are in outlying islands, outside Male’, and hence, the primary source of rural income. Earnings received by local fishermen from MIFCO reached US$9.05 million and US$12.20 million in 1998 and 1999 respectively. Besides fishing, there are some other fisheries-related activities in Maldives. There is an ongoing test project on pearl cultivation in Maldives, funded by the United Nations Development Programme (UNDP). There are also ornamental fish farms in Maldives. Supporting sectors to the fisheries sector such as the construction and maintenance of fishing vessel and trade in fishing gear, equipment and products, are becoming more important.

There are numerous strengths in the existing fisheries sector which can be further leveraged for the achievement of Vision 2020.

Strengths

Key strengths of Maldives’ fisheries sector include:

i) Well-endowed marine resources for value-added production, trading of marine products, aquaculture and other potential fisheries activities including research, marine studies and recreation fishing.

ii) Presence of an existing pool of fishermen skilled in eco-friendly fishing methods such as pole and line fishing. Pole and line fishing using vessels of similar size to Maldivian masdhoni have been shown to be the most economically efficient fishing units by a comprehensive study by Food and Agriculture Organisation (FAO) in 2000. This gear used by Maldivian fishermen was shown to be more economically efficient than purse seining and trawling.

iii) Maldives has an existing system for protecting and conserving the environment, and the use of pole and line method for harvesting is environmentally friendly. This technique can be marketed as one of the inherent values of the fish harvest and aqua-production from Maldives, in response to international trends towards eco-friendly fishing.

iv) Maldivian fish products are already exported to numerous markets around the world.

v) Canned tuna from Maldives is a valued quality product in its major market, Europe. It
already commands a higher than normal price in Europe because of the pole and line method used in fishing, and the environmentally friendly policy and regulatory framework of fisheries in the country.

vi) Increased diversification of the sector with greater private sector participation in the expansion and diversification of the sector.

Areas of developmental concerns

There are, however, several shortcomings in the existing fisheries sector which will hinder its further growth:

i) Maldives is over dependent on tuna for export. Export of tuna constituted 86% and 80% of Maldives total marine product exports by value in 1998 and 1999 respectively. In 2000, the estimated percentage was 77% (Table 2-3). Recent years, however, show a trend in diversification into new fisheries and new products.

<table>
<thead>
<tr>
<th>Table 2-3: Export of Marine Products, 1998 &amp; 1999</th>
</tr>
</thead>
<tbody>
<tr>
<td>Values (US$ '000)</td>
</tr>
<tr>
<td>-------------------</td>
</tr>
<tr>
<td>Canned fish</td>
</tr>
<tr>
<td>Dried tuna</td>
</tr>
<tr>
<td>Fresh or chilled tuna</td>
</tr>
<tr>
<td>Frozen tuna</td>
</tr>
<tr>
<td>Total (from tuna)</td>
</tr>
<tr>
<td>Fishmeal</td>
</tr>
<tr>
<td>Live reef fish</td>
</tr>
<tr>
<td>Fresh or chilled reef fish</td>
</tr>
<tr>
<td>Sea cucumber</td>
</tr>
<tr>
<td>Salted dried fish</td>
</tr>
<tr>
<td>Other marine products</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

Source: Maldives Customs Services

ii) MIFCO which dominates the sector for the export of canned tuna has not been effective in its mission to provide adequate services to increase exports and generate revenues for the sector. It does not have sufficient capability and capacity to store and market Maldives tuna competitively in overseas markets. Maldives, having a relatively small share of the international tuna market, is not able to influence external market price, hence is highly vulnerable to depressed external market prices, as experienced in 1999 and 2000.
iii) There are inadequate market promotion activities to promote the export of other marine products from Maldives. Private marine products traders and fishermen do not have information on overseas market and foreign competitors that is critical for developing more export trade.

iv) Maldivian fishers and private sector parties involved in fish production and exports lack the skills and information on post harvest handling and quality assurance in production to produce high value products for niche markets.

v) Inadequate public sector investments into support infrastructure and facilities such as commercial fishery harbours and cold stores, quality assurance laboratory services, chilling and handling facilities for fisheries other than canned tuna products by MIFCO. This is a significant obstacle to the further development and diversified fisheries and value added secondary production activities in the fisheries sector.

iv) Local banks and finance institutions do not provide adequate volumes and appropriate schemes of finance and credit for investment in fisheries and other marine product ventures such as the building, mechanisation and upgrading of fishing vessels, investments into secondary fisheries production and farming of fish and other marine products. In 1999\textsuperscript{1}, 55\% of total credit to the private sector was for the tourism sector. In comparison, commercial bank loans and advances to the fisheries sector was a mere 5.3\%.

Possible areas for enhancement

- The Government can take a pro-active catalytic role for upgrading and expansion of the fisheries sector:
  - Export development and promotion. Specifically, there is a need to undertake more marine R&D activities to identify the types of commercially viable fisheries that may be sustainably harvested in Maldives, and into possible value-added products for niche markets.
  - Market intelligence of overseas markets need to be gathered and disseminated to local exporters to assist them to export more higher-value marine products overseas.
  - Active international marketing based on an eco-labeling strategy, capitalising on the clean and well-conserved marine environment in which the fishes are harvested and environmentally-friendly methods of harvesting used, can be carried out to differentiate Maldives’ exports and create greater awareness among the target customers of the high standard of marine products from Maldives.

\textsuperscript{1} Source: Maldives Monetary Authority.
The role of MIFCO is to be reviewed and capability in the following areas can be built up:
- Collection and storage of tuna.
- Processing of tunas into high-value products.
- Improved quality and packaging.
- Improved marketing of tuna.
- Cost reduction in production and adoption of more appropriate product mix.

Private sector players can be assisted to develop new business activities in the sector such as farming of prawns, squid, sea bass, reef fishes, crabs, abalone, ornamental fish and scallops. Products such as reef fishes e.g. grouper can potentially fetch higher values. Steps, therefore, need to be taken to develop farms for the breeding and exporting of higher value marine products and for continuous research into new high-value marine products that have export potential.

Private sector can be further assisted through public sector investment into support infrastructure and services for the growth of the fisheries sector. One example is the establishment of commercial fishing harbours that provide ice and other ancillary services near good fishing grounds and aquaculture farms.

Possibilities for expansion in the outer zone fishery (beyond 75 miles) especially for yellowfin can be supported. This would entail the replacement of the current foreign fishing for yellowfin in this area (i.e. between 75 miles and the outer limits of the EEZ) by domestic fishing.

Explore various financing schemes to support fisheries and secondary products in the sector to expand and diversify their fishing and secondary production activities. For development activities such as the establishment of experimental farms to identify new breeds of marine products, the Government will have to provide the lead, including initial funding. Alternatively, funding can be sourced from IDAs or donor partners for such developmental project. For farming of high-value marine products such as reef fish species like groupers, which are commercially viable, Maldives can try to attract investment from its existing trade partners such as Japan and Singapore to joint venture with local partners or the Government.

New financing sources also have to be secured to fund the envisaged expansion of the private sector participation in secondary production and diversification in fisheries. The Government can play catalytic role in some areas such as training of Maldivians and international marketing of Maldives' fisheries exports. IDAs, on the other hand, can be solicited to fund fisheries projects that protect and conserve the marine and ecological environment while promoting sustainable fisheries products.
**Agriculture Sector**

Agriculture continues to play a minor and diminishing role in the economy, constrained by the limited availability of cultivatable land and the abundance of cheap imports of vegetables and fruits. The sector contributed 3.6% of the national GDP in 1995, but in 2000, the sector contributed only 2.8%. Most staple foods are imported. Some of the products that are presently farmed on agricultural islands in Maldives are papaya, watermelon, banana, chilli, taro, salad greens, cabbages and coconut.

Apart from domestic consumption needs, the continuous influx of tourists will generate an increasing demand for fresh agricultural products. With the possibility of commercial ports in Northern and Southern Maldives, there will likely be increased demand for local agricultural products, as transshipment vessels need to replenish their stores with fish, meats, fresh produce and fruits to meet the dietary needs of the crew. There are thus, good reasons to further develop the sector and to attract more local participation in the agricultural sector.

The consulting team is of the view that this sector has the potential for further development to enable Maldives to become self-sufficient in some vegetable and fruits, save foreign exchange as well as to provide alternative occupations to Maldivians who prefer jobs in the agricultural sector.

**Strengths**

i) Presence of untapped islands which can be developed into agricultural islands.

ii) A sizeable, ready domestic market of about 300,000 people and close to half a million tourists.

**Areas of developmental concerns**

i) Influx of cheaper imports from Sri Lanka making harvests from community-based farms in Maldives not competitive, resulting in substantial foreign exchange leakage.

ii) Distribution of the products to resorts imposes high operation costs because of poor inter-island linkages. The transport difficulty has also rendered the delivery of perishable products nonviable.

iii) Small farmers are not able to distribute and market their products economically and efficiently because of the lack of market information and distribution channels.
iv) Lack of capital to finance agricultural activities which can be fairly capital-intensive if advanced technology is employed. Furthermore, there is constant need for working capital between crops harvests.

v) Preference among local Maldivians to choose fishing over agricultural activities for livelihood because of the shorter gestation period of their investment and more immediate earnings.

Possible areas for enhancement

• Develop agricultural activities to meet the needs of locals as well as tourists. There are three possible tracks to develop more agricultural activities.

- For the locals, they can be encouraged to undertake garden farming to farm crops for their own consumptions. This is particularly useful in outer islands where many women are not active economically.

- To cater to the pool of tourists, higher-value products can be commercially farmed to meet their needs. Such farm investments can take the form of smaller-scale farms by resort owners on resort islands e.g. Sun Island owned by the Villa Group.

- Sizeable vegetable and fruits farming can also be carried out commercially on selected agricultural islands developed and managed by both local and/or foreign farmers.

• Establish the catalytic roles of the Government to support the above activities. These roles include,

- Research and development.

- Training and education of existing farmers on farming techniques.

- Sales of crop seeding to Maldivians in outer islands to encourage them to plant them in their own yards.

- Helping island farms to secure funding either from IDAs which are generally more forthcoming in funding such social projects or through micro-credit programmes, supported by the Government.

• Regional trade/distribution centres on main islands within the new Northern and Southern Growth Regions can be set up to facilitate the trading and distribution of agricultural
products from the farms. These centres can also cater to the distribution of fisheries products, handcraft and other products.
Garments Manufacturing Sector

This sector warrants special mention, as the production from this sector constituted 39% of Maldives' exports in 1999. If the original intention of bringing in garments manufacturing was to nurture domestic interest to develop another economic plank for Maldives, it has not taken off as desired. The economic contribution of the sector to government revenues is minimal (royalty of 3% of export values) and in terms of job creation, the sector employs only a small number of local Maldivians. In 2000, the sector relies on about 2,000 expatriates and about 400 Maldivians are employed in the sector. Almost all productions are made to order, with little value-added work e.g. design, being undertaken in Maldives. Practically all the factories are owned by foreign investors who are in Maldives to enjoy the import quotas for exports to the American market.

However, the import quota for textile products is likely to be phased out in 2005. This may result in the decline of this sector as garment manufacturers may shift their operations elsewhere. The prospect for the sector is thus, uncertain.

In such an event, the group of local expertise who are working in these garment factories will be left without jobs and that may not be desirable, both economically and socially. Maldives can thus, look into how the nature of this industry can be restructured to retain existing expertise and to generate economic benefits. One proposed enhancement that can be adopted is to work with selected owners of these garment factories (local ones if there are) to build up a home-based garment industry. Essentially, women who live in populous areas can be engaged to work at home to produce high-value garments and apparels such as souvenir T-shirts, curtains or even traditional Maldivian costumes such as *libaas, munda, feyli* and *rumaa*, to target tourists who visit Maldives. The home-based industry model can also be extended to other handicrafts if proven to be successful. In the long run, successful Maldivian apparels and handicraft can also be exported overseas.

There are many benefits of such a home-based industry for an emerging economy. Firstly, the industry can draw more Maldivians, particularly women, to participate actively in the economy. Secondly, skills and wealth generated by the country can be spread to the Maldivians living on outer islands, achieving greater social balance throughout the country. Last but not least, such a home-based industry may also become a tourist attraction, expanding the range and variety of tourist products in Maldives. This home-based industry model is also applicable to agriculture, fisheries and tourism sectors. Maldives can become self-sufficient as a result and less vulnerable to external forces, particularly with regards to security of food supplies.
CHAPTER 3 - RECOMMENDATIONS

INTRODUCTION

As discussed in chapter 2, there are several factors that may affect Maldives’ progress towards Vision 2020.

• Firstly, Maldives has a small domestic market and limited labour force. Hence, it is difficult to sustain large-scale manufacturing activities.

• Secondly, the narrow export base, which is highly dependent on one commodity - tuna and one service driver, tourism - limits its growth. Both sectors have “limited” differentiation, hence, in the face of stiff international competition and/or economic downturn, growth in these sectors may slow down.

• The possible graduation of Maldives to a “developing country” status, hence, it may no longer be eligible for preferential treatment enjoyed by “Least Developed Countries” for exports to developed countries and for securing of special developmental loans.

• Vulnerability and volatility of the economy due to the above factors.

Nevertheless, Maldives can still ride this transitional storm by capitalising on its existing pool of expertise in tourism and fisheries sectors and its inherent strength – the high standard ecological and marine environment – to upgrade and develop niche sectors, which are ecologically friendly. This strength will certainly take on even greater importance with the current trend of growing international awareness and concern over the protection of the environment.

What can be done for Maldives to achieve the economic, human resources and technology thrusts in Vision 2020?

Taking into consideration the constraints facing Maldives and the inherent strengths of the country, the consulting team would like to recommend a strategic plan that will facilitate Maldives to achieve the strategic thrusts in Vision 2020. Specifically, this plan encompasses:

• Incorporating traditional sectors, which need expansion and upgrading with new potential growth sectors in an integrated fashion using a cluster approach.

• Structuring recommendations under different clusters by short, medium and long-term time frames to allow policy makers to implement them by stages. The time perspective is
crucial in differentiating between what can be immediately implemented and what would require more preparation and consideration.

• The longer-term recommendations also require resources in both physical and financial terms, HRD and training and coordination and consultation with other parties in the private sector for people to accept and commit to the projects as well as institutional capacity building and strengthening.

• As part of the continuous development, the consulting team highlights some broad but critical supporting policy areas that will reinforce the overall competitiveness and efficiency of the economy.

In view of the strengths and constraints faced by Maldives, the consulting team takes the following factors into consideration while selecting the economic clusters for further development:

i) The potential economic contribution of a sector towards the achievement of Vision 2020 in terms of government revenue, foreign exchange earning and employment creation.

ii) Whether the sector can be strategically positioned internationally by capitalising on the existing comparative advantages and competitive edge provided by the well-conserved marine and ecological environment and development of the said sector will not threaten this environment.

iii) Sectors that have the following characteristics in view of the limited market and labour size – differentiated, niche and high-value added.

iv) Sectors that play strong supporting role to the development of other core sectors and yet have the potential to be groomed into exportable sectors in future.

v) Sectors that have potential to be developed in all Growth Regions throughout Maldives.
ECONOMIC CLUSTERS FOR FOCUSED DEVELOPMENT

Referring to Chart 3-1,

Existing economic clusters which the consulting team feels have strong potential for further development to generate more economic benefits and stability for Maldives are as follows:

- Tourism
- Fisheries
- Agriculture

The expansion of the traditional clusters will spin off new growth clusters which will complement the traditional ones, to ensure the sustainability of Maldives’ economy in the long run. The new growth clusters are,

- Port and Logistic Services (PLS)
- Information and Communication Technology (ICT) sector
- Offshore Banking and Financial Centre (OFC)
Critical ancillary services sectors that need upgrading to support the core economic clusters identified above include:

- Construction and real estate
- Communication and telecommunication infrastructure and services
- Transport and logistics infrastructure and services
- Professional and business services in accounting, legal, management consulting, education and training, architecture and engineering
- Financial services in domestic banking, insurance and reinsurance
- Trading - domestic intra-island, regional and international

The utilisation and application of ICT will play a crucial part in expediting the development as well as improving the performance of many economic sectors. ICT is therefore an important sector that is generic and cuts across-the-board in all other economic sectors. However, while ICT as part of vision 2020, constitutes a broad strategic thrust, it will take time to be fully implemented to achieve the desired goals.
EXPANSION OF TRADITIONAL CORE ECONOMIC CLUSTERS

Tourism Cluster

The tourism sector is one of the two key economic sectors which continue to be a major driver of other economic activities in Maldives.

The Government, however, may consider playing a catalytic role in diversifying this sector’s markets as well as facilitating the development of certain unique and high-value “products” and niches. This involvement will be in line with Maldives’ goal as set out in its Vision 2020, that is, to become one of the major middle-income countries by 2020.

Strategic thrust: To sustain the present growth and develop new directions for the tourism sector in stages. By 2020, Maldives would not only have a thriving and differentiated tourism trade with holiday, education and business travellers, but also be able to provide tourism related consultancy and expertise to emerging island economies.

Under the short-term recommendations, Maldives needs to expand its tourist base as well as develop new “tourism products”. The aim is to make the Maldives tourism sector economically sustainable, especially in the face of international competition posed by similar tourist destinations elsewhere.
Development and promotion of tourism activities in the Northern and Southern Growth Regions may also have to be accelerated in order to bring benefits to the population in these growth centres as well as speeding up the development of infrastructural activities in these regions.

In the medium-term, the focus would be to reinforce product differentiation so that Maldives would be seen as more than just “another tourist destination with beaches and resorts”. It should be able to market its complete “Maldivian way of life”, that is, its culture, ecological environment, handicrafts and cuisine. This would be equivalent to developing a distinct branding which will have positive linkages to other sectors.

Once the objectives of both the short- and medium-term have been achieved, Maldives will be poised to move into other advanced tourism-related businesses, namely providing tourism consultancy to other emerging island economies.

Specific recommendations:

Short-term

- One of the short-term’s objectives would be to sustain the growth in the tourism sector. Therefore it is critical to broaden the base and mix of tourists and visitors through a mix of new markets as well as new tourist products. This will require the following thrusts:

  o Expand the broad spread of tourists from other regions besides Europe

    Maldives is a unique tourist destination as it is highly environmentally friendly and ecologically sound. This in itself is a brand name or marketing icon. It will be an ideal location for visitors from North-east and South-east Asia. In addition, with the recent political developments in the Pacific Islands, Australians and New Zealanders can be enticed to visit the Maldives instead of their traditional holiday haunts in the Pacific.

    Each of the above market segments will require different marketing strategy. Tourists from Asia, especially urbanites in Japan, Hong Kong, Singapore and South Korea, have developed a love for nature and adventure. In particular, Japanese couples like to have their marriages solemnised in natural settings, of which Hawaii and other Pacific Islands seem to be the favourite choices presently. In addition, the school holidays in those countries are between the months of May and July (the low tourist season in the Maldives). Therefore, Maldives would be able to tap upon this tourist traffic on the basis of its own natural endowment.
As for the potential tourist trade from Oceania, winter in these countries is between June-August, which again is within Maldives’ low tourist season. Therefore, Maldives would be an ideal holiday destination for visitors from Australia and New Zealand getting away from the winter.

The Maldives Tourism Promotion Board can therefore, initiate aggressive marketing campaigns to the above countries. Road shows or tourist fairs can be organised in conjunction with the private sectors to the above countries to publicise the Maldives and meet up with the local travel and tourist operators. But first, intensive market studies of the needs of these market segments must be undertaken.

1. **Facilitate eco-educational tours for students and schools**

   Endowed with rich marine and ecological resources, Maldives can target the niche education market by developing and promoting itself as the education destination for marine and eco-related education. This can be done by working with foreign schools and education institutions, especially those in Asia, to arrange study trips to Maldives, for the purpose of on-site observation and field research into marine life and ecological environment.

   There is a growing trend among Asian schools, notably Japanese and Singapore, to organise school tours to overseas countries to study environment and ecology issues during vacations, which fall in the middle or/and end of the year. Therefore, Maldives can tap on this opportunity by promoting such organised eco-educational tours for both students and their parents. For the latter, this can be one approach to entice them to make Maldives a regular holiday destination.

2. **Aim to be a centre for conferences and corporate retreats.**

   Targeting business visitors can also alleviate the seasonality of the tourism trade. Maldives, endowed with natural serenity on islands resorts, is an ideal location for companies to hold their corporate planning exercises as well as conferences, particularly those that relate to marine sector, agriculture, environment protection, eco- and marine-tourism and development of island economies. The latter would serve to reinforce the Maldives’ eco-friendly image and brand.

   The Government together with the private sector can assess their respective abilities and the available infrastructures to determine the type of conferences they can support. The Government can lobby those international organisations with mandates to conserve natural environment and ecology, to host seminars and conferences in the Maldives. Supporting facilities to complement the
organisation of these conferences such as experiment stations, marine and ecological showcases can be built to enhance the attraction of Maldives as the destination for such conferences.

- **Retirement villages for the elderly from Asia**

  With demographic ageing in these Asian countries, Singapore and Japan for example, the idea of a retirement destination for the affluent aged is another possible pursuit to attract new tourists to Maldives. The Maldives with its relaxed lifestyle and environment, will be potential location for this segment of visitors. In view of this potential market niche, the Government can plan and demarcate certain islands as “Paradise Islands” for such purposes. However, this needs supporting facilities like medical, healthcare services or at least easy access to these via telemedicine and direct airlift to facilities as and when needed.

- To be able to provide better service for the various types of tourists/visitors, there is an urgent need to develop a local and trained labour pool of workers to meet the needs of the tourism sector, especially in line with the above market segments. In addition, new tourist-related skills and services have to be taught in preparation for the medium-term. The Government may thus, consider taking the following actions, in collaboration with the private sector.

  - Incorporate career development module at early stage of secondary education to develop an interest among younger Maldivians to consider making professions and careers in tourism.
  
  - Establish collaborative programmes between Maldives’ Faculty of Hospitality and Tourism Studies and other established foreign tourism schools, with a view of upgrading the current training programs to include resort management as well as tourist-related technical skills.
  
  - Set up a mandatory Skills Development Fund (SDF) with contribution from the private sector tourism players. This will be aimed at training more locals to gradually replace the foreigners in skill-intensive jobs such as general management, diving, preparation of cuisines, training and supervisory tasks.

- In order to systematically develop and promote tourism as well as distribute tourism benefits to the population in the new Growth Regions, the government may consider drawing up a master plan outlining the development of tourism facilities such as hotels and tourist attractions and supporting infrastructural facilities e.g. airport and ferry jetties within the Northern and Southern growth centres, to cater to tourism growth.
**Medium-term**

Once the above mix of markets and products have been developed, the next major role for the Government within the medium-term is to market Maldives as a brand to reflect its strong culture, social values and environmental standard so as to generate positive spin-offs to others sectors. This is aimed at facilitating the diffusion of economic benefits among a broader segment of the population, in terms of employment and income.

- In many countries, tourism business has substantial linkages with other core economic sectors and supporting sectors. In Maldives, economic linkages between tourism and several other core sectors namely fisheries, agriculture and handicraft can be further strengthened.

**Linkage with cultural activities and handicrafts**

- In line with the above objective, the Government should consider playing a key role in promoting Maldivian culture and handicrafts.

- It can demarcate and develop certain islands or communities like the one in Dhangethi (called cultural islands) to showcase the strong Maldivian cultural heritage such as cultural dances and traditional music. Arrangements can be made for tourists to visit and get a feel of Maldivian lifestyle, sharing meals or even spending a night in such island communities in their various facets and nuances.

- Such cultural-related tours can add a further boost to the development and promotion of cottage handicraft industry. In that regard, the Government can assist the development of the handicraft sector, similar to what the Government in Cyprus has done, to groom its handicrafts sector (**Box 1**).

  - Provide seed money or some working capital for communities to start their cottage industry.

  - Provide training to enhance the productivity of the craftsmen and develop new handicraft to meet the demand of the market.

  - The Government can also provide the logistical and marketing/distribution supports to the islanders who produce the handicrafts. Distribution/Trading centres can be established in Male’ and key islands in the Northern and Southern Growth Regions to facilitate the distribution of such handicraft. This would promote local arts and crafts as part of cultural preservation.
- A hub (Handicraft Centre) and spokes (in the form of regional co-operatives) strategy can be employed to develop the handicraft sector. In practice, a Handicraft and Cultural Centre can be set up in Malé’ (or Hulhule’), as the centre to showcase handicrafts as well as the Art of handicraft-making in Maldives. Similar concept can be duplicated in the other Growth Regions, if proven successful.

- The proposed Handicraft Centre can also house a few retail outlets for the sales of local handicrafts produced by the handicraft cottage industry, to tourists. To achieve economies of scale, handicraft islands can be organised into regional co-operatives (spokes) to facilitate transport arrangement for the production and raw materials to and from Malé’. The proposed Handicraft Centre can also become an attraction for tourists, with display of the process of handicraft making.

**Box 1: Handicraft sector in Cyprus**
(Source: Handicraft Guide on, Cyprus)

Although the occasional blacksmith and candle maker can still be found in the narrow streets of Nicosia, and a potter or chair-maker can still do brisk business in the mountain village of Phini, in Cyprus, as in the rest of the world, mechanisation has taken its toll on traditional crafts. Nevertheless, craftsmanship is far from extinct. And the Cyprus Handicrafts Authority has done a great deal of work to ensure that local craftwork enthusiasts will not have to resort to museums of popular art for a glimpse of traditional skills.

Under a project launched in 1975, the Authority has given lessons in embroidery in rural centres and refugee settlements throughout the island. Its experts have also delved deep into the past to rediscover traditional crafts. A centre has now been established in Nicosia to act as a showpiece for the Handicrafts Authority and provide training. At the same time, incentives have been provided to village communities to build up cottage industries. Especially successful has been the revival of lace in Athienou, Kornos and Kilani, and pottery in Kornos, Phini and Ayios Dimitrios.

It was recognised at an early stage that, for craft projects to succeed, a steady demand for the works produced would be necessary. Thus annual exhibitions were organised in Cyprus and samples sent to shows abroad to promote interest. At the same time, daily tours of the Handicrafts Centre were arranged, enabling Cypriots and tourists alike to see the craftsmen and women at work. Apart from its promotional work, the Handicraft Centre has also become an important tourist attraction in its own right, providing quality products and a workshop and training facilities.

- Steps may also be taken to explore how traditional masdhoni (fishing vessel) can be marketed as a tourist attraction, to capitalise on the outstanding skills of masdhoni builder in Maldives. For a start, some of the fishing/cargoes dhoni can be used to transport tourists around the islands while they are not used for fishing. At a later stage after interests in dhoni sailing have been generated among tourists, an annual festival, “Dhoni Regatta of Maldives” can be developed. Besides drawing more tourists to the country, this initiative also has the potential to further expand the dhoni building and maintenance industry in Maldives, providing more jobs to skilled craftsmen. The interests in dhoni will also likely generate interests in dhoni handicrafts which are currently made by some local craftsmen in Maldives. This can become a tourist attraction like the ship models in Mauritius.
Linkage with food, fisheries and agriculture sectors

One of the key attractions in any society is its local cuisine. In that respect, Maldives has its own specialties such as tuna and marine products. Specifically;

• More Maldivian fisheries and marine products such as specially prepared tunas and Rihaakuru can also be sold directly to the visitors in Maldives, through specially organised marketing and promotional activities to create greater awareness of local Maldivian products among the visitors. The fact that most visitors are from Europe where eco-friendly fisheries and fish products are the rage can be capitalised on by marketing strategies that highlight the sustainable fisheries systems and methods. For example, due to the pole and line fishing method used, Maldivian tuna is “dolphin safe”, a selling point in Europe. Maldives is also one of the few nations with a predominantly pole and line fishing. Furthermore, it bans the use of non-target fishing gears such as seine nets, other types of nets and the use of chemical. Successful examples of exports through sales to tourists are sales of abalone and scallops to tourists in Australia and the sales of specially packed yam ice-cream to visitors in the Philippines.

• Consumption of local seafood can also be promoted among tourists by marketing Maldives as the “Paradise for Seafood”. This can be done through hotels and restaurants promoting authentic Maldivian cuisine or organising food fairs. Creative cuisine, recipes, food preparation and presentation may be potential spinoffs for exports and further product development. Such promotions are common in other tourist destinations such as Hawaii (Box 2).

Box 2: Seafood promotion in Hawaii
(Source: SIA Priority Quarterly, 1st Quarter 2001)
If you are willing to get up early with the sun about 6am, the local fish for which Hawaiian cuisine is famous goes on auction fresh off the boat at the downtown fish market. Here whole yellow fin tuna or ahi and other exotically name denizens of the deep are sold for substantial prices to bidders who will have them ready to serve by dinner.

In addition, there are also many restaurants which specialise in beautifully preparing seafood caught in the water off Hawaii. Most visitors who go to Hawaii simply cannot resist savoring the seafood in Hawaii.

• As part of the cuisine experience, arrangements can be made for tourists to visit specially designated cultural islands or fishing villages where meals using native fresh products can be prepared to make the event a wholesome and participatory one for those so inclined. Having sampled indigenous cuisines, tourists would be enticed to purchase marine products directly from the source which would spawn another segment for proper packaging and preserving of such products. If the tourists like these products so much, further export orders may be anticipated as another spin-off. These visits can in fact, form part of the tour packages catering to tourists.
Another major promotional drive would be the organising of a national Food Gala event to raise awareness among tourists. Besides earning more foreign exchange from the sales of more locally-produced seafood, the preference of tourists for seafood and other home-grown foodstuff as a result of such campaigns, will immediately lead to lower consumption of other meat products which are mainly imported.

Other related spin-offs can be the promotion of sport fishing. The most important factor associated with the enjoyment of the sport is a high standard marine environment, which is precisely Maldives’ inherent strength. Lessons can be drawn from Canada (Box 3), which has a very successful recreational fisheries sector, except in this case Maldives will be catering mainly for foreigners. Through recreational fishing, economic spin-offs will naturally be generated to the cluster of supporting activities such as yacht services, boat services, fishing baits, refreshment, camping gears and accommodations.

Box 3: Recreation Fishing in Canada
(Source: Department of Fisheries and Oceans of the Federal Canadian Government)

Over 4.2 million anglers fished a total of 55.5 million days in 1995. 3.3 million, or over 90% of this effort was expended by resident Canadians and 9.5% by foreign anglers (almost 749,000) who visited this country, many for the sole purpose of recreational fishing. The average revenue per salmon caught by sports anglers was estimated at nearly $500, compared to less than $7.00 for a commercially caught fish. In the recreational fisheries sector, the 1995 Survey of Recreational Fishery found that the angling population spent US$5.4 billion in Canada in 1995, of which US$3.6 billion was directly associated with their sport and US$1.8 billion was spent on services directly related to their angling activities. Foreign anglers accounted for 17% of this total.

Clearly, this industry accounts for thousands of jobs in the tourism industry.
Recreational fishing can take the form of:
- Deep-sea fishing in the water around Maldives where there are healthy population of yellow fin tuna, skipjack tuna and several species of sharks.
- Fee fishing

Long-term

One of the key long-term objectives would be for Maldives to position itself as the leading authority on tourism development for small island economies, and hence able to export related knowledge services. At this juncture, Maldives will be consolidating and developing more high-value service expertise.

Maldives can expand its tourist outlook by looking at how it can complement the tourist traffic within the South Asian region. One angle can be a “one-stop fly in and cruise” centre. It can be the starting point for tourists to fly to Maldives and catch a cruise liner to tour the islands of Maldives and also the South Asia region with cruise stop-over at Sri Lanka and India. In this way, Maldives would be capitalising on the strengths of its neighbours. It would be better if Maldivians have some equity interests in these cruise
ships because such “floating hotels” will lower tourists’ need for accommodation, food and such in Maldives itself.

• Another long-term strategy can be to attract movie industry players to produce film movies in Maldives, especially those requiring a natural paradise setting.

• Maldives is an ideal place to set up an international diving school to train local diving specialists and foreigners to become leisure diving instructors as well as occupation divers in deep-sea industrial diving.

• By then, Maldives will be in a strong position to upgrade the Faculty of Hospitality and Tourism Studies that already have developed linkages with other foreign renowned tourism institutions, to become a regional training centre catering to students from other parts of Asia and other island economies.

• The ecologically friendly marine environment is conducive for setting up coral gardens to research and farm corals, some of which may be exported overseas for transplanting in an effort to restore coral reefs in other countries and island economies. It could eventually be diversified into a research and rehabilitation centre for corals.

• At this stage, Maldives would have developed an in-depth expertise in developing tourism in island economies. It would have its own pool of indigenous consultants who can provide specialised consulting services and training in other countries for island resort development and management. Such expertise includes architecture services, piling on islands, reclamation work, harbour dredging, master planning and resort operation, as well as the softer aspects of management and operation.

• As a result of efforts made during the short- and medium-term to develop its tourism sector while preserving its ecological setting, Maldives would further enhance its internationally acclaimed reputation for developing an ecologically sustainable economic environment. On that note, it would be in a position to leverage on this image to organise and host major international fairs, exhibitions and conferences on eco-tourism and marine issues.
The fisheries sector is the biggest export sector and one of the largest employers of local Maldivians in the Maldives. However, it relies disproportionately on tuna and tuna-related products. This leaves an important and vital sector highly dependent on a narrow product base, where the Maldives, having a relatively small share of the international tuna market, is not able to influence external market price. It is hence subject to external market price fluctuations.

Therefore, there is a need to develop and expand to a wider variety of marine products that have high-values and destined for a wider range of niche markets. Currently, there are already some exports of a variety of reef fish and live aquarium fish. The Government can assist in further developing these high-value niche products to diversify and broaden the fisheries base.

Furthermore, instead of just focussing on fisheries, this sector can be further enhanced and developed into a holistic fisheries cluster that will encompass the entire value chain of marine-related activities, ranging from harvesting activities to high-value secondary production, marine research and development. This will require efforts to enhance the overall development of the sector through more intensive research facilities, marketing activities, export facilitation, upgrading of the human resource, to undertake higher-value production activities and at the same time, employing new technology to build international competitiveness.
Strategic thrust: To increase the value of all marine-related activities by diversification and high-value secondary production so as to generate sustainable productive employment and export earnings as well as introduce new marine-related activities with the view of providing consultancy and expertise to other economies.

Specific recommendations:

Short-term

For the short-term, the Government needs to review the roles of the main state players in this sector, namely MIFCO and Ministries of Fisheries, Agriculture and Marine Resources (MOFAMR). In addition, to create a balanced development of this important sector, the Government may wish to get more private sector participants involved, both private businesses and the rural communities.

In this regard, the first issue for the Government to address is to reconsider the roles of MOFAMR, MIFCO and other private sector participants like the trading community, local businesses and the rural island communities. There are several areas for enhancement of the fisheries industry. They are:

- Development of secondary production of high-value marine products for niche markets;
- Development of new and higher value marine species like reef fish in a sustainable manner;
- Setting up aquaculture facilities;
- Upgrading of storage and logistic facilities;
- Introduction of new fishing methods at improving catches and improving the value of landed catch;
- Development of improved international marketing campaigns;
- Training and human resources development; and
- Financing and credit.

It is suggested that the Government through MOFAMR, focuses on developing new fisheries and value-added fish products, and provide training and technical assistance to the rural communities in developing the aquaculture cottage industries. The products can be sold to traders and small enterprises, which with the assistance from MOFAMR, market them abroad.

MIFCO may continue to focus on the tuna trade in the short-term, but with emphasis on developing new processes for producing unique tuna products. Product differentiation to cater to a wider selection of markets and tastes in the world market is a must.
Along this line of thinking, the following activities can be undertaken:

- Assess and identify new markets for tuna products from Maldives. In addition, both MIFCO and MOFAMR can explore developing a brand for their tuna products. One branding concept would be to profile Maldivian fishing methods as environmentally friendly e.g. dolphin-safe methods are used for fishing Maldivian tuna. This distinguishes Maldivian tuna from those from other countries and allows for higher premium pricing. Other forms of differentiation can include adding flavours into its canned tuna after studying taste preferences of potential markets and how consumers like their tuna prepared. Alternative approaches would be different processing methods like processing high-grade tuna steaks, which can be an ideal substitute for meat for the health conscious. Other forms of creating distinct branding and product differentiation would be to develop unique packaging or ecologically-friendly packaging.

- Improved marketing. Improved marketing will require higher quality, new packaging and even new products. As a small supplier of potentially high quality product, Maldives can seek and develop market niches for its marine products. The intense competition in international fish markets suggests that an attempt of this nature might be best served by entering into international marketing agreements with one or more established international fish marketing organisations. The benefits are potentially higher prices and the opportunity to learn the trade of international fish marketing from the best.

- Develop new marine products. In that respect, the Government will need to assess production and export potential of high-value marine products, that have commercially viability in major and niche external markets, and can be carried out in an ecological sustainable manner in the Maldives. Here, the Government may have to take an active role in jump-starting these new product sectors. It can establish experimental fisheries laboratories to develop high-value and exportable species and other marine products with ready markets e.g. prawns, lobsters etc. Farming and ranching technologies for these species can then be transferred to fishing or rural communities for aqua farming. This form of aquaculture will also complement natural ocean harvest, to enhance the stocks of existing marine products. For instance, small white fishes can be harvested from the sea, farmed to commercially viable size before they are exported overseas. The Government can involve MIFCO and the private sector to develop a network of collection points to collect the aqua-farmed products for distribution to local as well as export markets. However, it must be realised that aquaculture in the Maldives must necessarily be in open marine areas, thereby, creating the danger of ecological imbalance in the event of inappropriate species introduction. Hence, potential negative impacts on marine ecosystems and hence on tourism must be safeguarded against in the development of a marine aquaculture industry.
Maldives can draw on the experience of the Canadian aquaculture sector to develop aquaculture for other marine products such as clams, seaweeds and lobsters (Box 4). Besides managing the supply, learning achieved can be applied to develop new species of marine products, which can fetch higher market values. A diversified range of marine products would help stabilise the seasonality and volatility associated with the fish and marine sector and give room for economies of scope. Besides direct economic spin-off, aquaculture activities can also provide job opportunities for the women of Maldives, who are currently less economically active.

Box 4: Aquaculture in Canada
(Source: Department of Fisheries and Oceans of the Federal Canadian Government)

In Canada, aquaculture was first used to enhance nature stocks of marine products. It has now become a large-scale commercial industry across the country providing direct and indirect economic benefits to many local and regional economies. The Office of the Commissioner for Aquaculture Development recorded that commercial aquaculture production dates back to the 1950s, when trout and oysters were the species of interest. Over the past 20 years, commercial production has expanded to include several salmon species, Arctic char, mussels, clams and scallops. New species that are being developed include black cod in British Columbia and halibut, haddock and Atlantic cod in the Maritime Provinces. The Canadian aquaculture industry generated a value of US$280 million in 1997. Aquaculture production in 1997 accounted for about 8% of the total fish production in Canada, but accounted for almost 19% of the total value. Value-added analysis indicates that in 1997, the Canadian aquaculture industry generated a gross output of about US$369 million from the sales of aquaculture products and services and gross value added generation of US$128 million. The economic contribution of aquaculture industry is quite significant. In terms of employment contribution, the Office of the Commissioner for Aquaculture Development (OCAD) noted that the total estimated direct employment figures on a national basis within the aquaculture industry are in excess of 5,000 workers. In addition to direct jobs, aquaculture generates indirect employment through linkages to industry suppliers. According to OCAD, for every direct job in the industry, two-thirds of a job is created in the support service and on the supply side.

As part of market development, Maldives can set up an agency to develop and aggressively market high-value marine products for niche markets through external collaboration and agreements as suggested above in improved marketing. This agency may either take on a sole role of promoting the fisheries exports or take on a broader national role of promoting all Maldives’ exports. This agency will also support a marine information resource center, the function of which would be to acquire, store and effectively disseminate information pertaining to:-

i) Export opportunities and information on overseas markets;
ii) World price information and movement of marine products;
iii) Quality assurance in primary and secondary production; and
iv) Developments in the marine food industries including consumer preferences, health factors etc.

MIFCO can look into investing in new facilities such as post-harvest chilling, freezing and processing facilities. This will allow MIFCO to move up the value chain by focusing on providing logistics and storage, processing and packaging and international marketing of higher value marine products. In addition, MIFCO must undertake cost reduction
strategies that will enable it to become more competitive in production and marketing activities.

• The growth of the fisheries sector is likely to bring about further growth in ancillary economic sectors, in particular building and repairing of fishing vessels/boats. Hence, apprenticeship programmes to train the younger generation in this area can be developed to cater to this market demand. Professionalism and skills would assure a steady stream of new recruits into the sector which may otherwise have an unfavourable image of a backward trade.

• Development and delivery of extension and training courses to upgrade the skills of the existing labour force in fisheries and incoming labour to support diversification, aquaculture, secondary production of high-value species, business management and marketing, has to be undertaken concurrently.

• One bottleneck in fisheries sector development and diversification is the lack of finance available on appropriate terms to those engaged in primary harvesting activities and secondary production activities. This can be addressed in the short-term through new financing sources to fund the envisaged expansion of the private sector participation in secondary production and diversification in fisheries. The Government must play a catalytic role in providing developmental funding but it should use private sector financial and credit institutions domestically and externally to disseminate the funds based on market criteria. Besides providing the developmental credit lines, the Government not over intervene apart from ensuring the necessary regulatory and stable investment framework to support such lending. IDAs can be approached to fund fisheries projects that protect and conserve the marine and ecological environment while promoting sustainable fisheries products.

Medium-term

For the medium-term, Maldives can take two approaches. One is to further explore and develop higher-value marine products, which can leverage on the backs of the success of the early aquaculture industries.

The other approach would be to focus on initiating the development of marine-related knowledge industry.

• At this stage, various rural fishing communities with the technical support of the MOFAMR would have developed a higher level of competence in aquaculture of reef fishes and other high-value species. In this regard, MOFAMR can prepare and train select fishing communities in breeding high-value aquarium fishes and pearl cultivation. This will generate
good income for the local community (see Box 5 on ornamental fish farm in Singapore). MIFCO and other private sector players would have established the logistic network with these fishing communities during the short-term, can act as the purchaser and distributors for these high-value but perishable marine products. At a later stage, the government may also consider privatising MIFCO in parts or in whole, so as to encourage more competition in secondary production of the skipjack tuna. The various options that are available to privatise the company will have to be carefully studied.

Box 5: Ornamental fish farm in Singapore. Qian Hu Fish Farm
(Source: Agro-food & Veterinary Authority of Singapore)

Qian Hu is an ornamental fish farm occupying a land area of 4.2 hectares in Singapore. It has an investment of more than S$4 million. The farm was recently awarded the ISO14,000 for its environmental management system. The farm is designed “factory-style”, comprising 12 main buildings for its trading and farming operations. When fully-developed, the farm’s modern facilities will include a temperature-controlled packing house for packing fish for export, a computerised system for trading records, a laboratory for fish examination and water quality analysis, and various indoor/outdoor culture systems for holding/farming fish under controlled environment. The company plans to focus on farming high-value fish, such as South American catfish and Dragon fish. Annual turnover is expected to reach S$10 (US$6.0) million when fully operational.

- Private sector can be assisted through public sector investments into support infrastructure and services to the fisheries sector such as commercial fishing harbours near good fishing grounds that provide bunkering, ice, fuel and other ancillary services. Other infrastructural facilities such as cold stores and chilling and handling facilities at export points (regional and international airports) can be provided by the Government to support diversified fisheries such as yellowfin tuna and grouper fisheries that target high-value fresh chilled export products.

- Multi day fisheries: Possibilities for expansion in the outer zone fishery (beyond 75 miles), especially for yellowfin can be supported. This would entail the replacement of the current foreign fishing for yellowfin in this area (i.e. between 75 miles and the outer limits of the EEZ) by domestic fishing. Further opportunities for expanding the catch outside the Maldivian EEZ can be explored. The Indian Ocean is presently a significant focus for EU and Asian fleets, and is the second highest producing area world-wide. The private sector can be supported by the Government in adoption and use of technologies and improved methods for such a fishery.

- Establishment of Faculty of Fisheries and Marine Sciences: In order to be able to sustain the fisheries sector as a viable economic sector, and to reduce dependence of the national economy on a single sector, there is a need to support fisheries sector diversification and value-added secondary production in fisheries through the development of a local and trained labour pool of workers to meet the needs of the sector, especially in line with the above short and medium-term strategies. This will require the establishment within the Maldives College for Higher Education, a Faculty of Fisheries and Marine Sciences. The Faculty of Fisheries and Marine Sciences will provide education and training services.
needed to support a diversified and industrial fisheries sector, together with the marine sciences research and knowledge required to conserve and sustainably develop the marine resource base of the country.

• In addition to the establishment of this Faculty for higher education and training, the Government may support institutional capacity building and human resources development for the fisheries sector through the following actions, in collaboration with the private sector.
  o Incorporate career development module at early stage of secondary education to help develop an interest among younger Maldivians towards considering making professions and careers in fisheries.
  o Establish collaborative programmes between the Faculty for Fisheries and Marine Sciences and other established foreign fisheries and marine sciences research and training institutes with a view of upgrading and expanding its training programs to include harvesting and secondary production-related technical skills including food technology, production technologies and marketing.
  o Set up a mandatory SDF with contribution from the private sector fisheries and marine resource players. A SDF levy from these players will form a revenue source to subsidise approved training by them. This will be aimed at training more locals for skill-intensive jobs such as general management, production and fish technologists, supervisory tasks, consulting and training.

• Attracting foreign researchers and enterprises to base their marine and ecological research activities in Maldives. This will enable Maldivians to gradually adopt higher-value marine activities such as research and development and raise its international profile for marine and research developments.

**Long-term**

The long-term would see Maldives develop expertise in a wide range of marine-related disciplines like reef gardening, eco-friendly fishing methods, developing and preserving marine life. These would create substantial linkages to the tourism sector through underwater tours, recreational diving and underwater exploration activities. As part of the long-term strategy, the Maldives would be established as:

• A big-scale player in the supply of high-value aquaculture products such as pearl and ornamental fish. Such farms will also become tourist attractions to provide more variety of attractions and activities to draw a wider range of visitors to Maldives.
• A world-class, authoritative country for research in marine science and the protection of the marine environment. Building up of this international reputation, through the Faculty of Fisheries and Marines Sciences, will enable Maldives to attract more visitors, pursuing business and education interests in these areas.

• Maldivian consultants will participate in the provision of specialised consulting services and training in other countries for marine sector activities such as farming, marine research, marine environment management, professional diving, fishing and other forms of technical assistance for marine sectors.
Maldives imported about US$31 million worth of vegetable products in 1999. This is a sizable amount and is a significant drain on foreign exchange. There is thus, a possibility for local production of agro-products to substitute such imports and the foreign exchange saved could be used to finance the development and upgrading of the agriculture sector.

And because Maldives imports nearly all other types of food, it can be vulnerable to circumstances where it does not have any control over its food supplies. For example, any trouble or calamity could curtail food supply from its traditional sources of supply and Maldives population would have to pay more for foodstuff or even face food shortages. A worse scenario could be a complete disruption to its supply links. Hence, steps need to be taken to ensure that only food that Maldives cannot produce are imported and there is no undesirable dependency on external food supply.

In addition, the development of an agricultural sector, particularly the development of small-holdings or semi-commercial farming can provide alternative occupations for Maldivians in the rural islands who are currently not economically active.

Therefore, the Government should look at agriculture as a strategic sector within Maldives’ national security interests.

Presently, there are some agricultural activities in Maldives but they are not so well developed. This is because, unlike fishing, generally gestation periods of investment in agriculture are longer and it took a longer time for investors to see investment returns. In addition, food
imports are generally cheaper than local products at least in the short run. The Government, therefore, may have to take a proactive lead in developing this sector in a focussed and structured approach. It can focus on developing:

- Semi-commercial farming or home-based farming for the rural communities;
- Resort-linked agriculture where hotels and resorts would develop their own gardens to meet their needs; and
- Commercially developed plantation type orchards and vegetable farms in suitable areas.

**Strategic thrust:** To position the agricultural sector to contribute more to employment, income, preserve foreign exchange as well as enhance food security.

**Specific recommendations:**

**Short-term**

For the short-term, the Government’s main focus can be to raise awareness and importance of garden farming and to develop its institutional capacity to support the agriculture sector.

- A good starting point is to review the situation of current production by existing producers, assess and understand the problems and issues they faced. Previous studies that may have already reviewed prospects of more intensive approach to implement schemes and programmes, including concentrating on selected islands, can be built on to support agriculture production. The Government may wish to focus on the selected islands within the tourism zones to lower distribution costs. One good example is Ari Atoll, where there are many resorts, which provide ready markets for fruits and fresh vegetables. These efforts should also go hand-in-hand with current Population and Development Consolidation Programmes to achieve economies of scale.

- To encourage the development of semi-commercial farming for own consumption at home, the Government may need to create more awareness of the benefits of self-sufficiency by organising national campaigns.

- MOFAMR may step up training of more officers in agri-science and food production. In this regard, it could request assistance from international agencies dealing in agriculture like Food and Agriculture Organisation (FAO) and the World Bank for technical assistance and HRD.

- MOFAMR can also request assistance from the same institutions for help in setting up experimental stations to develop and nurture seedlings of suitable crops for distribution
to so as to kick-off the programmes. These seedlings would be provided to the respective rural island communities. Officers from MOFAMR can periodically visit these communities and provide advice and technical assistance to these home-base farmers.

- Government can facilitate the development of vegetable farms and fruit orchards by identifying suitable islands to be set aside for commercial agriculture of high-value products and pro-actively attract suitable investors, where possible to co-invest with the Government in these ventures. The Government can also set up experimental laboratories to develop seedlings for these farms.

- Resort owners can also be encouraged and assisted to undertake such ventures to meet the fruits and vegetable demands from the tourism business. A useful model is the formula of setting aside part of Sun Island for agriculture by the resort owner, Villa Group, to meet its own resorts’ agricultural products requirement and to supply six other resorts not owned by the group.

- In addition, the Government can facilitate the procurement and distribution of surplus produce from the semi-commercial farms for sale in either the domestic market or export. This would supplement the incomes of the respective communities.

- To facilitate the distribution of agricultural products to meet the needs of the domestic population and tourists, regional distribution/trading centres can be set up on key islands within the Northern, Southern and other Growth Regions to enable buyers and suppliers to meet for trading of these products.

**Medium- and long-term**

By the middle of the medium-term, there should be sufficient supplies of vegetables and fruits from plantation-type farms to the resorts and even the domestic markets. In addition, semi-commercial farming would be generating sufficient amount of produce to meet the needs of the respective communities.

For both the medium and long-term, the objectives would be to explore developing high yield and high-value produce and fruits using high-tech techniques e.g. like hydroponics for domestic needs and in the longer-term for export. In addition, livestock rearing specifically poultry can be initiated as a home-based activity.

- The Government may take the lead in introducing new high-value breeds/varieties of fruits and vegetables that can be commercially produced in Maldives. In addition, it can also conduct research into new farming methods for implementation. An example is hydroponics, which can be explored on some of the islands that are smaller and less
fertil. As this is a fairly capital-intensive business, the Government may wish to partner with local firms to develop these commercial farms. The following example shows how a high yield can be achieved (Box 6).

**Box 6: Oh Chin Huat Hydroponic Farm in Singapore**
(Source: Agro-food & Veterinary Authority of Singapore)

The vegetables produced by this farm are unique in that they are pesticide-free and are grown under soilless conditions using hydroponics in modular greenhouses. The 2.4 hectare farm produces 1000 kg of vegetables daily. The types of crops grown include the traditional leafy vegetables such as caixin, xiaobaicai, gailan, bayam, leaf lettuce and other crops such as herb. Research and development is also conducted on the farm to improve the quality and range of produce offered to the market.

- The Government together with some of the established agriculture players, can study and research export market potentials for high-value and new breeds of produce and fruits, some, which can be economically transported by air. It can explore certain downstream product development, which can be exported. For example coconuts from which special cream and milk can be produced from can be marketed abroad (Box 7).

**Box 7: Potential economic values of coconut demonstrated by M & S Food Industries Sdn. Bhd. of Malaysia**
(Source: Website of M & S Food Industries Sdn. Bhd. of Malaysia)

- M & S Food offers coconut cream and coconut milk packed in 400ml can.
- It has an advanced German PKL machine which fills UHT coconut cream into aseptic Combibloc packets. Quality packaging retains the natural taste and aroma of fresh coconut.
- To service ready-meal, food and drink manufacturers, M & S Food has produced coconut cream which is filled into 20 litre bulk aseptic bag-in-box.
- M & S also packs refreshing and pure coconut water Combibloc packet in 250ml and 500ml sizes.

- The Government can also initiate the development of poultry rearing as part of the semi-commercial agriculture development. As what it has been done in the short-term, the MOFAMR can now experiment with high yielding poultry and provide the hatchings to the respective communities for local farming.
DEVELOPMENT OF NEW CORE ECONOMIC CLUSTERS

Port and Logistics Services Cluster (PLS)

The establishment of linkages among major ports, sub-ports and airports within Maldives is very important to support the expansion of the traditional clusters. This is particularly important for the tourism, fisheries and agriculture sectors to facilitate the transportation of passengers and collection cum distribution of marine and agricultural products respectively. Hence, in the short-term, the developmental focus for this sector is to establish the logistic linkages between Male’ and key ports in the Northern and Southern Growth Regions, as well as intra-islands transport network within these Growth Regions.

The development of the commercial port in Hithadhoo is a good starting point for establishing these important linkages. The Hithadhoo port can play a “hub” role to link all the other key islands within the Southern Growth Region for the collection and distribution of marine resource, agriculture products, handicrafts and other goods. Connections to the airport in Gan in the medium-term will further enhance the whole distribution network. Infrastructural facilities such as cold stores and chilling and handling facilities can also be set up in these hub ports to support diversified fisheries such as yellowfin tuna and grouper fisheries that target high-value fresh chilled export products as well as agricultural products distribution. Another “hub” port in Northern Growth Region can be identified and developed later to provide linkage with the sub-ports in Northern Maldives\(^1\) for similar objective.

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\(^1\)Hanimadhoo is a possible location.
The development of the Hithadoo Port will propel the upgrading and expansion of the agriculture and marine resource sectors. In the long-term, the Northern and/or Southern hub ports can be further upgraded to link up with other commercial ports in South Asia for transshipment of cargoes.

Strategic thrust: To establish a reliable inter-region and intra-region transportation system to support the development of core economic clusters in Maldives and to extend the role of the commercial ports in the South or/and North to complement other ports in South Asia for cargo transshipment in the long-term.

Specific recommendations:

Short-term

- To ensure systematic and co-ordinated development of various key ports throughout Maldives as well as to avoid poor regulation of safety standards, adverse impact on environment and duplication of resources, a master plan for the port and logistic sectors can be developed to look into the following areas:

  (i) Review and build on these previous studies/surveys to identify the more strategically important islands within the various Growth Regions in Maldives. These are islands which have higher passengers and cargo (fisheries and agricultural produces) traffic.

  (ii) Review how to link the main ports of Male’ and the proposed one in the Southern and Northern Growth Regions, with the more important sub-ports within the Growth regions for the development of an integrated trans-island transportation.

  (iii) To develop a viable plan to establish and upgrade collection centers for marine products and agricultural produce among the islands.

- As there is good potential to provide logistical and shipping services to support the development of the core economic clusters and to deliver efficient services to increase productivity and lower business costs, the Government may wish to consider setting up training facilities and centers to train general and specialist logistics workers.

- Related to this sector is the export of seafaring services by Maldivians. According to estimates by the Ministry of Transport and Civil Aviation, currently, about 1,500 of the 5,000 Maldivian seamen work in foreign vessels. It is estimated that the seamen earn an estimated annual income of US$12 million every year. A large proportion of this is brought back into the country either in the form of goods or money income. Considering the high demand for seamen in the world marine labour market and the considerable
reputational foothold that Maldivian seamen have established in this market, Maldives, through its Maritime Training Centre (MTC) can continue to attract and train more locals to take up seafaring careers. In addition, MTC can collaborate with established foreign seafaring institutes to offer courses to train senior officers. The current global practice of employing seamen including officers from one nationality is another inducement for Maldivians to equip themselves with all levels of skills and qualifications needed. With a complete range of seafaring expertise from lower-ranking ones to the most senior officers, Maldives will be in a very good position to become an important exporting country for seafaring services.

Medium-term

• Given the proximity of the port from Gan International Airport, the Government can study how to develop flying cruise business. Tourists can be flown into Maldives through Gan and then board cruise-liners based at the proposed port, for cruise holidays around Maldives and South Asian region. This will require the upgrading of Gan International Airport. As such, the Government will have to take the lead, accompanied by players in the tourism sector to promote the above to cruise operators. Initially, special concessions may have to be granted to cruise operators to use Maldives as a cruise pick-up point. Similar cruise ports can also be considered in the Northern Growth Region if successful and viable.

• Linkage between the ports and the airport will also enable perishable marine and farm products collected by the vessels to be flown to Male’ or Sri Lanka for distribution to the final buyers. In the future, with development of Gan into an international airport, marine products can also be exported directly to other parts of the world.

• The Government may wish to simultaneously review existing custom procedures and look into simplifying such procedures so as to speed up the cargo traffic, in order to attract shippers to use Maldives as a transshipment center.

Long-term

• Steps need to be taken to upgrade and equip Maldives’ port with well-equipped terminal facilities for cargo handling to complement other ports in the region, particularly the ones in Sri Lanka and India.

• When sufficient shipping calls on the port, steps can be taken to attract logistic players such as shipping companies, freight forwarders, warehousing and other logistic providers to base their operations at the proposed port. In this way the Maldives can act as warehouse for equipment and spare parts for delivery to the South Asian economies.
In the longer-term, steps need to be taken to establish physical and electronic links with other ports in the region such as those in Colombo, Bombay and other parts of South Asia so that shipping and cargo documentation can be submitted in advance before ships reach port. This will speed up such documentation allowing rapid cargo handling.
Information and Communication Technology (ICT) Cluster

The use of technology is very important to enhance and speed up the proposed development of the economic clusters. The current ICT scene in Maldives is very encouraging as there is already an existing mass of IT activities in Maldives. The use of computers is common in government offices and private companies and a number of Maldivians have also undergone IT training as IT is a subject in the existing education syllabus.

The short-term and medium-term goal for development of the ICT cluster is to enhance the competitiveness of existing economic clusters. For instance, in the fisheries cluster, the use of ICT such as mobile phone can speed up communication among fishermen and fish traders. The use of Internet to communicate with overseas buyers will lower the cost of communication.

The successful application of ICT to core economic clusters in Maldives will gradually groom Maldivians skilled in the use of technology to support economic development. This may also spin-off entrepreneurs who will capitalise on this knowledge to develop ICT products and services for export to other island economies. The development of the ICT sector to become an export-oriented cluster, however, will be a long-term objective.

The Government has a very important role for the development of a viable ICT sector. To kick start the sector, the Technology master plan that is currently being developed by the
Ministry of Communications, Science and Technology, can set a national direction and outline a holistic approach for the adoption of ICT in Maldives (see Box 8). The following broad issues will also have to be addressed in the master plan.

- **IT Penetration** – Personal computers have to be made as widely available and affordable in schools and at homes. The all-important costs of utility as in telecom and electricity must also be looked at to make IT accessibility affordable.

- **Computer literacy** – for ICT sector to develop, a large part of the population businesses should be adapting to and adopting IT for transaction purposes; be it purchasing on-line, applying on-line or on-line searching information. In this respect, IT training has to be made easily accessible and affordable to as many Maldivians as possible.

- **Physical infrastructure** – There need to be constant development and upgrading of the telecommunication system in order to meet the demands of electronic data interchange and e-commerce related traffic. In addition, close attention is required on other ancillary infrastructure like power, transportation and logistics. In this respect, the cost of utilities such as telecommunication and electricity will need to be lowered in order to encourage greater adoption and utilisation of ICT.

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**Box 8: Singapore’s Information Technology (IT) Master Plan**
(Source: “Intelligent Environments”, published by North-Holland (1997))

Singapore’s IT initiatives evolved in **three phases**, each framed by a national plan that clearly articulated goals, policies, resources and projects.

The **first phase** from 1981 to 1985 saw the start of the Civil Service Computerisation Programme and the establishment of the National Computer Board. The Programme’s broad objective was to computerize government ministries so as to increase productivity and raise the quality of public services. An important subtext of the first phase was for Singapore to seed its own cadre of computer professionals. The application technologies exploited were mainly in areas such as transaction processing, data modeling and database management systems.

The **second phase** from 1986 to 1990 was the period of the National Information Technology Plan. The twin goals of the Plan were to develop a strong export-oriented IT industry and to improve business productivity through IT application. The focus has shifted from public sector to private sector. The development of IT manpower evolved further into applied research endeavours. Principal enabling technologies included software engineering, expert systems and electronic data interchange. By early 1990s, Singapore had a thriving IT industry with a growing number of indigenous IT firms exporting to the region, the US and Europe.

The **third phase** began in 1991 with the launch of the IT2000 masterplan. Singapore is to be transformed into an intelligent island, where IT permeates every aspect of the society, at home, work and play. The stated goals are to apply IT extensively in order to enhance national competitiveness and to improve quality of life of its citizens.
Strategic thrust: To develop a viable ICT sector that will support the development and upgrading of its target economic sectors within the short- and medium-term and to develop a strong export-oriented ICT industry, led by indigenous ICT firms in the long-term.

Specific recommendations:

**Short-term**

- The proposed Technology Master Plan may also have to incorporate the following areas:
  - How ICT can be employed in all the economic clusters to enhance productivity and competitiveness of the clusters.
  - How connectivity within the country, between offices and between homes, can be developed in the long-term.
  - Explore how a National Computer Board to promote and launch programmes to encourage adoption of ICT will also be useful in this regard to build the critical mass in the use of ICT.

- The Government can also take the lead in enhancing the electronic networks among the various ministries and departments to facilitate better communications as well as speed up the utilisation of IT among Government employees.

- Once all the government ministries and departments are electronically linked, an external Government network can be established in phases to facilitate transactions between Government and the public for the payment of government fees and accessing information such as latest trading regulations and rules. The establishment of this e-Government network would also facilitate the next stage to make e-transactions readily available among private businesses and players.

- To assist those enterprises without computers or connection facilities, the Government can set up service bureaus where for a fee, companies can engage them to conduct their government-related transactions.

- To build up the IT penetration within Maldives, the Government can take immediate measures to lower the costs of using IT.
  - The high costs of electricity and telecommunication charges will need to be lowered in order to facilitate the development of the ICT application and exports.
  - Ensure that more people have access to personal computers by making them more affordable. The Government can further reduce tariffs and other duties on computers and other IT equipment. Another approach would be to encourage the basic assembly of IT equipment and computers. This can be looked upon as a strategic industry for the purpose of producing affordable computers for the
population so as to increase general computerisation ability.
- Computer training courses can also be made more widely available to the people at affordable price through training subsidies by the Government.
- The Government can try to equip as many schools with computers as possible and introduce more IT syllabus in the education system.
- To encourage enterprises to adopt IT in their operations, the Government can provide tax incentives and deductions for purchase of IT equipment as well as cost of IT training for staff. It should target those enterprises in the key sectors namely tourism, marine, agriculture, port and logistics. It also improves connectivity, efficiency and productivity across-the-board.

To jump start ICT initiatives for the key economic sectors, the Government can set up industry private-public committees to jointly develop IT applications. For example, the following activities can be implemented in the respective sectors:

- In the tourism sector,
  - Develop and update a holistic Maldives tourist website with tourist information like hotel charges, climate, sights etc which can be established to promote Maldives as a tourist destination worldwide.
  - The above website can also be enhanced to allow for online transactions such as for reservation of resorts, safaris cruise and tour packages system.
  - Electronic means of communications among players in the travel industry such as tour operators and resort owners will cut down the costs of communications.
  - All backroom operations such as accounting, account payable and receivable, facilities reservation etc. are computerised to enhance productivity.

- In the fisheries sector,
  - Electronic means of communications among players in the fisheries sector such as fisherman or secondary producers, aquaculture product farmers and exporters will cut down the costs of communication.
  - Technology could be further developed for use to better detect fish and for weather forecasting.
  - Further provision of improved communication equipment to fishermen so as to alert and direct them to areas with abundant fish stock and prices.
  - Develop real time information on world prices on marine products as well as information database on overseas markets and export products should be made available to local and locally-based companies in export of marine products.
  - IT can be used to enhance, expand and diversify secondary production and improve value-addition in country such as through quality assurance and development of new high-value products.
Continuous upgrading of existing website on Maldives fisheries sector to more effectively market Maldives’ marine products.

- For the logistic and port sector,
  - The most important initiative would be developing an automated trade documentation system so as to speedily process import and export documents.
  - This will require a committee comprising of trade and custom officials, freight forwarders, transportation agents and traders to develop and simplify trade procedures.
  - An electronic system can further be developed to link the various airports and ports.

- For the Banking sector,
  - Automated-teller-machines (ATM) and electronic banking have yet to make a significant presence and impact in Maldives. As much as ICT improves and enhances productivity and efficiency in tapping and disseminating funds, the spread of electronic banking is the most immediate and fastest way to get people in touch with over-the-counter technology.

**Medium-term**

The medium-term would focus on developing and enhancing basic and intermediate IT skills developed during the short-term. They are as follows:

- In order to groom indigenous ICT firms, the Government can actively identify and invite leading foreign ICT companies to participate in bigger scale IT development projects in Maldives, together with local ICT firms. The objective of which is to provide a platform to enable Maldivians to work alongside foreign consultants and software developers for skills and knowledge transfer.

- An alternative option is to proactively attract and facilitate foreign ICT experts, in particular, those from neighbouring countries, to join local indigenous firms.

- Successful indigenous firms can be assisted to export their products and services overseas.

**Long-term**

- ICT will also be adopted at home to improve the lifestyles of the people. One area of such ICT applications that may permeate households and lifestyle is online learning of training courses offered by institutions from overseas.
• The Government will have to provide some capital to establish an advanced information infrastructure within Maldives for businessmen, Government officials and the individual citizens to access and assimilate for their business and individuals’ needs. On the wired islands, companies will also be able to exchange information to coordinate their activities.

• In the long-term, Maldives will be able to export and license all those technology that are employed to enhance the competitiveness of the core sectors, particularly fisheries and agriculture, to other island economies. Examples of such technologies are (i) the use of sonar and other radar system for locating fisheries to speed up harvest, (ii) production technologies in fisheries and (ii) indigenous innovative methods for enhancing communication linkages between islands.
The establishment of an OFC will take time to materialise. However, before the establishment of an OFC, it is important that a sound financial system be put in place and a critical mass of financial activities built up within the country. Only a sound and credible financial system can provide foreign financial institutions the confidence to park their funds in a country. Hence, as part of the long-term plan to establish OFC activities in Maldives, the immediate goal for this sector is to ensure the availability of funding for the proposed expansion of traditional clusters and development of new spin-off clusters.

In this regard, funding will be required in the following areas:

- Research & Development e.g. to identify suitable agriculture breeds.
- Establish essential infrastructure to kick-start the clusters such as transportation linkages between selected islands.
- Provide assistance to develop island communities e.g. micro-credit programme and training of local communities.
- Appropriate tax incentives to establish

Some of the sources of such funding are as follows:

- IDAs or donor partners for funds to develop the infrastructures for social benefits and for protection of the environment. IDAs and donor partners are generally more forthcoming in providing financial support for such infrastructures because the funding
required for such projects in Maldives are not very big. Furthermore, these projects will enhance the overall living standard of the population, which is in line with the interests of most of these fund providers.

• **Micro-credit programmes:** Most of the proposals/projects in this study can be supported and funded by micro-credit programmes. This is very useful for the individual farmers and Small Medium Enterprises (SMEs) because it is difficult for them to secure working capitals from commercial banks.

• **Local savings/assets:** Local savings can also be mobilised to finance some of these projects. This will be elaborated in subsequent section.

• **Commercial loans:** offered by banks to finance bigger scale farming. Qualifying criteria for securing such loans can be based on the attractiveness and potential returns from the project.

Currently, there is a limited range of banking and financing products in Maldives and modern concepts of banking, credit and financing are not readily available. Existing banking products are mainly for trade financing, not for the funding of long-term developmental projects. Hence, the financial market needs to be upgraded to meet the new demands. Some kind of developmental banking can be considered.

Having established a strong local financial sector, Maldives would then be in a better position to become an OFC for companies that wish to set up a base to invest in growing Asia, in particular South Asia. Key attractiveness of Maldives for establishment of such a base include,

• Being in the Asian time zone, it complements other financial centres in the Northern Hemisphere such as London and Frankfurt in Europe, Tokyo in Japan and New York in the USA.

• As a very conducive place for living and relaxation, Maldives is an ideal place for expatriate employees of companies from these countries to work in as well, particularly during the cold months of winter.

A successful OFC can generate a lot of economic benefits for a country as in the case of the Bahamas, illustrated in Box 9 see next page.
Offshore banking and financing activities can play an important role for an economy. In Bahamas, the offshore banking and trust industry is the second leading contributor to the economy of the Bahamas, employing more than 10% of the country’s labour force and comprising 12% of GDP (US$340 million). The growth of these activities will also attract professional services providers such as accounting, legal, consulting and insurance brokerage to set up their operations in Maldives.

**Strategic thrust:** To provide necessary funding for the development of the Maldives’ economy and to become a leading OFC in Asia in the long-term.

**Specific recommendations:**

**Short-term**

- The Government has to develop a plan to meet the funding needs of the various economic sectors.
  - For bigger-scale projects such as the establishment of agriculture research/experiment stations, IDAs can be sourced for such funding needs.
  - To assist the SMEs and individual farmers in the agriculture and fisheries sector, the Government can work with banks to set up a micro-credit programme specially to provide them working capitals. This is very useful because these individuals and SMEs may not have sufficient collateral to secure such loans from commercial banks. Example of such a micro-credit programme in Cambodia is illustrated in Box 10. The Government can provide soft loans for the programme or provide guarantees for the loans. Funds required can be sourced from IDAs such as ADB or FAO which are generally more prepared to finance such social projects. Alternatively, the required funds may be sourced locally through a provident fund.

**Box 10: Micro-credit Programme offered by Association of Cambodian Local Economic Development Agencies (ACLEDA)**

Two types of financial products provided by ACLEDA are as follows:

a) **Micro Business Loan:** This product utilizes two differentiations, one for the collateralized loan of individual and the group guarantee methodology. Prospective clients form a group of 3 to 10 members. They receive business consultancy. During the group training the viability of the business ideas are discussed and the credit methodology explained. Credit officers in the villages of the clients usually conduct the consultancy. Group members can apply for different loan sizes up to about US$215 and individual customers can apply from about US$140 to US$215.

b) **Small business loans:** This product consists of collateralized loans to individual small business and agriculture entrepreneurs. Applicants have to undergo a selection procedure after which they receive consultancy in basic business management. Loan sizes are up to US$4,000.
• One potential source of fund that can be tapped to finance projects is domestic saving which can be mobilised before it gets invested abroad or consumed in less productive ways. This concept can be tied together with the establishment of a social security system, which will also protect labour and enforce old age financing.

In Maldives, a voluntary provident fund scheme exists for government employees established since 1988 with contribution of 5% each from government and civil servants. It has limited success with only 20% of eligible staff participating due to insufficient promotion and voluntary nature. It may be timely to resuscitate some if not all of the suggestions offered by the consultants from Singapore Central Provident Fund (Box 11) to increase and mobilise domestic saving.

**Box 11: Singapore Central Provident Fund**
(Source: Consultants’ report provided by Maldives Ministry of Finance & Treasury)

Consultants from the Singapore Central Provident Fund (CPF) made a mission in 1999 to Maldives and recommended a compulsory provident fund scheme extended gradually to both public and private sectors, raising the rate to 8%, withdrawal at age 60 with partial withdrawal for education, medical care and later, housing. The national provident fund should preferably, be autonomous and its funds professionally managed to enhance returns.

• There is also a need to review how the existing low-tax system in Maldives can be improved to build up public revenues. One of the ways of achieving this is by “awakening those sleeping assets” such as land, which potentially can help the Government to generate more revenues and serve as collateral for securing of financing for projects once an enabling land reform bill is in place.

• To establish a conducive financial environment, the existing financial regulations/guidelines, financial administrative procedures and other related legislations in Maldives has to be reviewed and enhanced to lay a sound and creditable framework to give existing banks in Maldives the confidence to extend loans to finance new ventures as well as for attracting foreign financial institutions to set up their representative offices in Maldives.

• In the short-term, international commercial banks and insurance companies can be encouraged to establish their representative offices in Maldives to provide financing for projects in local markets and other parts of Asia. These foreign banks can be encouraged to bring in new state of the art technology to speed up the development of the banking sector and provide opportunities for local Maldivians to work alongside their foreign counterparts, facilitating greater transfer of financial skills and knowledge.

• It is also important to review existing education curriculum and training programmes offered by training institutions in Maldives to introduce more financial subjects such as financial management, derivatives, project financing and equity market operations.
Medium-term

- Study missions to OFCs such as the British Virgin Islands, Bahamas or Caribbean can be undertaken to learn about OFC operations and also identify whether an European, American or more worldwide basis for legislation and jurisdiction is preferred in Maldives, to avoid direct competition if new market niches and products can be identified.

- It will also be useful to organise study missions to Japan, Europe and North America to meet up with leading financial institutions to understand their needs and to identify critical success factors of an OFC.

Long-term

- An existing government agency can be assigned to set up and manage the OFC. Some of the activities that this agency may have to look into are:

  - Identification of islands which are to be set aside for OFC activities and development of infrastructures such as telecommunication linkages on these islands.
  - Development of OFC incentives to attract financial institutions to Maldives. Appropriate tax incentives to establish a legitimate tax haven have to be carefully structured.
  - The legal framework conducive to an OFC must also be prepared.
  - Co-ordinate with the training institutions and education sector to ensure that a pool of supporting expertise in areas such as legal, accounting and finance are available.
DEVELOPMENT OF SUPPORTING SECTORS

Construction and Real Estate

This is an important ancillary sector which supports further development of the tourism and other economic clusters. For instance, the growth of the tourism sector will generate additional construction and real estate activities. Besides the construction of more tourist resorts on islands, such projects also involve construction of desalination plants, power generators and sewerage plants on the islands. On some islands, piling work, harbour dredging and reclamation work also have to be carried out. The types of construction activities related to island resorts development in Maldives are deemed to be very unique because of the small land mass on each island and the need for all these islands to be self-sufficient. It is important for Maldives to continue to upgrade these supporting sectors, particularly in the adoption of new technology, to support the growth of the core economic sectors.

New skills and technology to enhance the development of islands and protection of environment can be actively employed and tested to build Maldives into a leading player for construction activities on islands. In the long-term, Maldives’ construction and civil engineering companies can capitalise on these unique skills to participate in construction projects in other island economies.

Telecommunication

The development of this sector is critical to enhance communication between companies, particularly with the growing importance of employing ICT to build up business competitiveness in the new economy. With ICT, information and knowledge networks can also be set up to more effectively and efficiently gain access to time-critical information and sharpen business competitive edge.

However, in order to encourage greater application of ICT, the cost of telecommunication charges in Maldives must be lowered. The economics of deregulation and other forms of alliances which are more cost effective and affordable requires more in-depth study, which is outside the scope of this study.

Transport and Logistical Infrastructures

A comprehensive transport and logistic network is very crucial to facilitate the movement of passengers and cargoes across Maldives. This is particularly so with the development of the northern and southern regional centers, to serve the tourism, agriculture, fisheries and trading sectors. Inter-island logistical supports are also critical for the growth of fisheries, agriculture
and other economic sectors such as handicraft. Unless such transportation by sea, air or eventually by land can be provided economically and integrated efficiently, the growth of these sectors will continue to be constrained.

With the development of a commercial port in the South, logistical and freight-forwarding (both land and sea) services between Maldives and other South Asian countries, particularly Sri Lanka and India can be developed and reinforced to lower the costs of using Maldives as the transshipment port in the long run.

A more widespread use of ICT as in electronic scheduling, ticketing, tying up the transportation sector with tourism and telecommunication can be considered.

**Professional and Business Services in Accounting, Legal, Management and Consulting, Training, Architecture and Engineering**

The development of professional and business services is very important to support the development of the core economic sectors. These services can be developed and positioned so that they can support the growth of new sectors, particularly the establishment of the OFC and ICT clusters.

Career development in these professional fields should be encouraged in school. Manpower to deliver these business services can be groomed through the vocational institutes and the Maldives College of Higher Education.

Overseas training schools can also be attracted to Maldives to offer these professional services to the locals. Where possible, Maldivians can be sent for attachment with established firms in these fields overseas, so that they can be exposed to international practices. With the advent of eLearning, Maldivians can also be encouraged to pick up new skills and knowledge through web-based learning.
DEVELOPMENT OF CRITICAL SUPPORTING POLICIES

In order to smoothen the development of the various core and ancillary clusters identified in the previous sections, a number of critical supporting policies that span across the whole economy should be reviewed and where necessary, enhanced in order for Maldives to progress towards Vision 2020. These polices are aimed at the following critical areas:

• Human resources development
• Institutional development and strengthening
• Public-private partnership
• International cooperation

*Human Resource Development*

1) Educational System

Having decided on the core clusters for further development, it is critical for a manpower forecasting exercise to be conducted for the objective of ensuring that there is sufficient supply of trained manpower to meet the manpower needs.

The education system and other training systems may have to be reviewed to develop the inclination to the target economics sectors. For example, more courses and subjects involving marine sciences and IT can be included. Career development can be incorporated as part of the secondary school curriculum to inculcate a mindset change among the younger populations of the dynamism of the Maldivian economy and the need to pick up new skills to avoid being left behind.

2) Vocational Institutions

In addition, the existing colleges and vocational institutes in Maldives can consider developing specialised training programmes to provide relevant working skills to support the tourism, fisheries, agricultural, ICT, PLS as well as supporting business sectors.

The Government can also establish training units in the outlying island and rural communities to train them on home-based Fisheries and agriculture cultivation.
Institutional Development and Strengthening

1) Establishing the strategic role of the Government

The Government can conduct a review and assess the role it needs to undertake in order to push this proposed economic plan forward. During this phase, it will need to consider the involvement of the relevant ministries and their roles in this economic plan, and where their strengths and weakness lie as well as the areas each of these organisations will need upgrading and training so as to meet the challenges.

2) Institutional Strengthening

As part of the restructuring of the Government machinery to meet the demands of the new economic plan, there will a need to train different levels of government officials in various disciplines, especially those relating to the development of Maldives key economic sectors. Inter-ministerial co-ordination is an essential factor in any national plan implementation.

The economy is in the process of moving towards Vision 2020 and therefore there may be a need by the Government to train and encourage all its officers to be pro-business and appreciative of the issues faced by businessmen. This will help sharpen their focus in developing policies that will be conducive for business development and set the stage for private-public sector collaboration.

In that regard, the Government may consider the establishment of statutory boards or agencies under certain Ministries. These statutory boards or agencies have the advantage of a certain level of flexibility and autonomy so that they could work together with the private sector in developing the economic sectors. The private sector plays an important role in assisting the Government to formulate transparent policies. Please refer to the illustration of the statutory boards under the Singapore Ministry of Trade and Industry in Box 12.

Box 12: Statutory boards under Singapore Ministry of Trade and Industry (MTI)
(Source: The Singapore MTI’s website)

The Singapore Ministry of Trade and Industry (MTI) is charged with driving the Singapore economic development.

MTI oversees 9 statutory boards, which are semi-independent agencies, that specialises in carrying out specific plans and policies of the ministry. For example, one of MTI’s statutory board, the Singapore Trade Development Board (STDB), is tasked with developing and promoting Singapore’s trade.

Another statutory board, the Economic Development Board (EDB), is tasked with attracting foreign investment in an effort to develop knowledge-led industries.
Public-Private–Partnership

Within Maldives’ domestic context, the private sector includes the small businesses, trading communities, individual businessmen as well as the rural island communities in the outlying islands. These will be the agents for the development and sustainability of growth for the Maldivian economy. The foreign investors and players are also important as they can help Maldivians to attain international benchmarks and standards.

Therefore, the Government may need to foster closer links with the private sector and work together in preparing Maldives to progress towards Vision 2020. The Government’s role is to provide the basic hard and soft infrastructure including technical assistance and training to the private sector to enhance and upgrade existing and new economic activities.

The role of the private sector is to efficiently utilise resources and assistance given by the Government and IDAs in managing and operating the enterprises efficiently and in a sustainable manner so as to generate the flow of private and social returns to the initial capital outlay.

In the near future, some of these rural island communities, with Government’s assistance, could be organised and developed into co-operatives, which in addition to operating home-based industries could branch out into collective marketing and even financial management.

International Co-operations

viii) Linkage with trade blocks and other economic regions

To overcome diseconomies of scale and promote closer trade and investment flows, Maldives has to go regional or build up closer trade relationships with other countries.

Maldives is a member of the South Asian Association for Regional Co-operation (SAARC) and South Asian Preferential Trade Agreement (SAPTA). However, the present situation in South Asia is not conducive and has resulted in slow progress of the establishment of the free trade area under SAPTA in the region.

Maldives can thus work on bilateral free trade arrangement (FTA) with its regional partner(s) as a start and collaborate with selected countries in ASEAN, Africa or Europe. The specific partners and areas for cooperation may be beyond this study but certainly, regional pacts to enlarge economies of scale and scope are in line with the logic and rationale of strategic thrusts and recommendations made.

Meanwhile, Maldives has to pay attention to the liberalisation of industry sectors and markets under the agreements of the WTO so as to prepare itself to capitalise on new export opportunities and avoid threats to its key exports.
CONCLUSIONS

The recommendations set out in this strategic economic plan will help Maldives reduce the volatility and vulnerability of the current economy.

- Within the fisheries sector, diversification into high-value marine products other than skipjack tuna and secondary processing activities will add value. Improved marketing strategies will find new export markets, reducing its reliance on tuna and the European markets. At the same time, the building up of new expertise in marine related activities such as aquaculture, marine environment protection and marine research through the establishment of a Faculty of Fisheries and Marine Sciences, will enable Maldives to export these services in the long run.

- Similarly for tourism, the diversification into new tourism products will attract new groups of tourists as well as tourists from other geographical regions, besides Europe. The upgrading of manpower in the sector to groom higher-skilled Maldivians in occupations such as diving specialists, resort development and management will build up a pool of ready expertise which can be offered to other island economies.

- The upgrading and expansion of the agriculture sector, on the other hand, will help Maldives to save foreign exchange. In addition, it will bring about greater social balance in Maldives as (i) meaningful occupations will be created for local Maldivians who prefer jobs in the traditional sectors and (ii) Maldives is able to attain greater self-sufficiency in essential food supplies.

By capitalising on the expansion of traditional economic clusters namely tourism, agriculture and fisheries, Maldives will branch out into other new economic clusters - PLS, ICT and OFC. These new clusters will complement the traditional ones and advance them into modern progressive ones to ensure stability and sustainability of the whole Maldivian economy.

Economic success will enable Maldives to be acknowledged internationally as a model island economy that is able to attain economic progress while maintaining its ecological balance. As a model island economy, it will be in a better position to attract funding from IDAs and donor countries for further economic development. By linking such funding requirements to environment protection and upgrading of the social well being of local communities, many IDAs will be prepared to help Maldives. IDAs and Donor partners will also be more forthcoming to offer technical assistance and training to a country that is well managed economically and enjoys high standard environment protection and preservation. The successful management of the economy will also create confidence in foreign investors who will be attracted to invest in new and profitable enterprises supported by the IDAs and the Government. In all, the image of Maldives will be enhanced which will contribute to its attractiveness.
With this favourable international reputation and core competency in the management of island economy, Maldives will also be in a strong position to export consulting, engineering, training and other advisory services to other island economies.
Annex 1

Project Participants

IN MALDIVES

1. Attorney General’s Office
2. Bank of Maldives Plc. Ltd.
3. Business and Financial Services (BFS) Consulting
4. Foreign Investment Services Bureau
5. Maldives Association of Tourism Industry
6. Maldives College of Higher Education
7. Maldives Monetary Authority
8. Maldives National Chamber of Commerce and Industry
9. Ministry of Education
10. Ministry of Finance and Treasury
11. Ministry of Fisheries, Agriculture and Marine Resources
12. Ministry of Foreign Affairs
13. Ministry of Home Affairs, Housing and Environment
15. Ministry of Planning and National Development
16. Ministry of Communication, Science and Technology
17. Ministry of Tourism
18. Maldives Transport and Contracting Co. Ltd.
19. Ministry of Transport and Civil Aviation
20. Ministry of Trade and Industry
21. Sun Resort

IN SINGAPORE

22. Agri-food & Veterinary Authority of Singapore
23. Maldivian Government Trade Centre (in Singapore)
24. Pikane Trading Pte Ltd (Former farm owner and fish trader in Maldives)
25. Singapore International Airlines
26. Singapore Trade Development Board
27. Wah Change International (Owns Banyan Trees resorts)

FIELD VISITS IN MALDIVES

<table>
<thead>
<tr>
<th>Location</th>
<th>Description</th>
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<tbody>
<tr>
<td>Gan and Hithadhoo</td>
<td>Feedback from private businessmen. Study visits to four garment factories.</td>
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<td></td>
<td>Meeting with British consultant, Mr. Stephen Akester, on the ADB-funded Regional Development Project.</td>
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<tr>
<td>Sun Island</td>
<td>Feedback sessions on resort operation and commercial farm owned and managed by the resort.</td>
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<tr>
<td>Dhangethi</td>
<td>Study visit of culture center on the island.</td>
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<tr>
<td>Ariyadhoo</td>
<td>Visited coconut plantation.</td>
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## Annex 2

### Maldives Past Studies Reports

<table>
<thead>
<tr>
<th>No.</th>
<th>Title</th>
<th>Author/ Publishing Organization</th>
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<tbody>
<tr>
<td>2.</td>
<td>ADB Technical Assistance Programme Project on Development of a System of National Accounts - Large Establishment survey (LES) Guidelines for Filling-in Questionnaire on Resorts and Hotels, 1997</td>
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<td>13.</td>
<td>Hithadhoo Transhipment Port, July 1998</td>
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<td>Hulhumale' Reclamion and Residential development Project (bidding documents), Jan 2000</td>
<td>Maldives Housing and Urban Development Board</td>
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<td>15.</td>
<td>Hulhumale' Phase 1 Physical Development Part 1: Main Land Use distribution and housing development Master Plan (Draft final report), Jan 2000</td>
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<td>16.</td>
<td>Maldives – 25 years of independence</td>
<td>Media Transasia Ltd</td>
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<td>17.</td>
<td>Maldives – a Unique Country Discover Windows of Opportunities</td>
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<td>20.</td>
<td>Maldives Fisheries Sector (Draft), Dec 2000</td>
<td>Rural Development Sector Unit, South Asia Region World Bank</td>
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<td>Tourism Master Plan, 1996 – 2005 (Volume 1)</td>
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<td>27</td>
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<td>UNDP/World Tourism Organisation Technical Assistance Programme - Social, Economic and Environmental Impacts of Tourism, 2000</td>
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<td>30</td>
<td>Vision 2020</td>
<td>His Excellency, the President of the Maldives</td>
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