



Maldives Human Development Report

Challenges and Responses



Ministry of planning and National Development
United Nations Development Programme

Maldives

Human Development Report

Challenges and Responses

December 2000

© Ministry of Planning and National Development and
United Nations Development Programme, 2000

ISBN: 99915 – 819 – 2 - 8

Published by: Ministry of Planning and National Development and
United Nations Development Programme

All rights of this work are reserved. No part may be reproduced by any
process without prior written permission from the publisher. Shorts excepts
from the Publication may be reproduced for the purpose of research
or review provided due acknowledgement is made.

Printed in India: by Srinivas Fine Arts

Cover design: Muaviath ali

Layout: Fathimath Rukhsana

Electronic Report: Adobe Acrobat PDF file construction by Ahmed D.C. Ishaq, UNDP Malé 2001

CONTENTS

Foreword

Overview

Chapter One

THE STATE OF HUMAN DEVELOPMENT

Chapter Two

VULNERABILITY AND HUMAN DEVELOPMENT

Chapter Three

MANAGING THE ECONOMY

Chapter Four

CHALLENGES AND RESPONSES

Technical Note

References

This page is intentionally blank

Foreword

It is a matter of immense pride for all Maldivians that our country has made such remarkable progress in both economic growth and social development. Today the economy is flourishing, population growth is slowing, our indicators of health and education are the most favourable in the entire South Asian region and our exquisite islands are among the most highly coveted tourist destinations in the world. These outcomes are a result of several factors: enlightened leadership, rigorous development planning, the prudent management and investment of resources, and not least our unique religious and cultural identity that binds us together.

And yet there is little room for complacency. Within the context of the changing world there are several new and existing challenges we face as a nation. Our children are attaining increasingly higher levels of education and we have to design creative strategies to meet their aspirations and provide them with opportunities to make productive use of their skills. Our growth strategies need to be refined so that disparities are reduced and the benefits of economic advancement accrue to all our citizens – men, women and children. We also need to safeguard and promote their rights through governance that is responsive and legal measures that are sensitive and comprehensive. While we have made remarkable achievements in providing access to health and education, we now need to concentrate on improving the quality of services. Our environment is our greatest wealth but it is fragile and we need to undertake serious measures to manage and protect it. The National Vision 2020, which has been formulated through extensive consultation with the community and the private sector, succinctly defines and prioritizes all these concerns and identifies bold new approaches to comprehensively address them.

This is the first National Human Development Report prepared for the Maldives and it provides a wide-ranging account of the opportunities we possess and the challenges that we face as a nation. The Report emphasizes that the human development discourse puts people and what they value most – their security, their needs, their rights, their aspirations, their choices – at the centre of the development effort. It provides a measure of human development in the Maldives and takes stock of the progress that has been made. The Report highlights the fact that as a nation we are vulnerable to many external factors – including global environmental and economic changes to which we must be constantly alert. It concludes that we need to maintain the pace of economic progress and continue to take steps to distribute its benefits equitably. I trust that this Report will be read widely – by those in the government, non-government and private sectors, by doctors, teachers, environmentalists, students, community leaders, press persons and many others. I am sure that it will stimulate thinking and debate and provide an impetus for every citizen to participate in national development.

I wish to thank United Nations Development Programme, Maldives, for making the preparation and publication of this document. I hope that this will be the first of a continuing series of such reports.

*Ibrahim Hussain Zaki
Minister of Planning, and National Development*

Foreword

In 1990 UNDP brought out the first Human Development Report (HDR) and since then these reports have been published annually, contributing facts, figures and analysing emerging challenges in people-centred development around the globe. The HDRs have been valuable in providing insight into particular themes that were relevant at the time of their publication. The success of these reports in promoting the dialogue on the many facets of human development world wide has led to the production of National Human Development Reports in more than 120.

I am very pleased that the Maldives is joining this select group by releasing its first National Human Development Report jointly sponsored by the Ministry of Planning and National Development and the United Nations Development Programme. This first report appropriately focuses on the ***Challenges and responses*** for the country in the area of human development.

We all know that the real wealth of a nation is in its people. The objective of development is to put people and what they value most – their security, their aspirations, their needs, their rights, their choices – at the centre of development. It is this concern for people and their well being that constitutes the basis for the first National Human Development Report for the Maldives. And this is the way human development is defined – as a process of expanding choices, enhancing people’s capabilities, fulfilling rights and expanding freedoms. Likewise, as stated in the report, the normal ***standard per capita income is not a good indicator of human development in the context of Maldives. Neither is the Human Development Index (HDI). Both fail to capture the true vulnerability of people, the insecurity of the population, and the extraordinary challenges for ensuring sustainable human development.*** For over two decades effective policies have been put in place to ensure that the benefits of growth are channelled into assuring people many of the basic social and economic rights but the challenges still remains. On the other hand, establishing an effective system of participation and local governance is again yet another challenge for the Maldives. People’s participation is severely constrained by geo-physical limitations, by the relative insularity of island communities, limited access to information, and restricted transport and interconnections between islands. The country remains extremely dependent on fisheries and tourism and international trade. The challenges still remain.

Planning and implementing development projects in the Maldives takes a different way of looking at costs. To begin with, the appropriate ‘green’ technologies needed for even assuring people access to basic social services tend to be expensive. Further, the inadequacy of land-based resources implies that the Maldives is without durable building materials. There are neither rocks nor clays, and the country has not been able to afford experimentation with new types of possible building materials. Any type of construction therefore requires all imported materials without exception.

Hence, the geography and vulnerability of the Maldives make these seemingly common approaches to human development quite complex and formidable. ***Accelerating human development in the Maldives is not a challenge just for the country, but for the entire global community that is obliged to protect and nurture the extraordinarily rich natural and environmental resources of this unique island nation.*** These are some of many challenges and responses discussed in this report which I am sure will give the reader ample food for thought. I hope that the report will stimulate further dialogue on the process of human development for the Maldives. I would also like to express my sincere thanks to the Government of the Maldives and in particular to the Minister of Planning and National Development Hon. Mr. Ibrahim Hussain Zaki for his commitment and dedication, which have been invaluable for the publication of this first National Human Development Report for the Maldives.

Sjaak Bavelaar
UN Resident Co-ordinator and
UNDP Resident Representative

Maldives Human Development Report 2000

Overview

The real wealth of a nation is its people. And the purpose of development is to put people and what they value most – their security, their aspirations, their needs, their rights, their choices – at the centre of development. It is this concern for people and their well being that constitutes the basis for the first National Human Development Report for the Maldives. And this is the way human development is defined – as a process of expanding choices, enhancing people’s capabilities, fulfilling rights and expanding freedoms.

The Maldives has recorded some remarkable gains in human development since the 1970s.

The Maldives has many successes to report since the 1970s when it began to actively trade, exchange and interact with the rest of the world. The country today reports a life expectancy at birth of 70 years – almost 6 years higher than the average for all developing countries and some 20 years higher than the average of all least developed countries. The adult literacy rate in the Maldives is 98% - comparable to any advanced industrial society. And GNP per capita in 1998 was US\$1,130 – similar to the average for South-East Asia and the Pacific. Even on the Human Development Index, the Maldives scores a value of 0.725 and ranks 89th out of 174 countries – faring better than many other developing countries that are far richer in terms of per capita income than the Maldives.

The Maldives has witnessed remarkable gains in human development in the recent past. Between 1995-2000, real GDP grew by over 8% per annum. Between 1985-95, the infant mortality and under-five mortality rates were halved, life expectancy went up by almost 10 years, tuberculosis was controlled, and annual population growth rates dropped from almost 3% in the previous decade to 1.96%. The country’s

maternal mortality rate is now 158 per 100,000 live births – down from 400 in 1988. These are no small achievements for a country like the Maldives that confronts a set of unique challenges.

Nowhere else is the security of a people – and of a nation - so intimately tied to the wealth of its natural resources and the environment.

The very mention of the Maldives conjures up images of remote, palm-fringed islands with white beaches, turquoise lagoons, submarine coral gardens and a breathtaking diversity of sea life. And this indeed is true. The Maldivian atolls and islands are located to the south-west of Sri Lanka and India covering more than 90,000 square kilometres of the Indian Ocean. Of the 1,190 islands that make up the country, only 198 are inhabited by as few as 270,101 people. More than 74,069 people live in Male, the capital city of just 2 square kilometres, making it among the most densely populated places in the world. The rest of the population is scattered on several small islands. Almost 80% of inhabited islands have a population of less than 1,000. Only 6 islands have a population of more than 3,000. Such a widely dispersed settlement pattern makes the Maldives geographically unique - with few parallels in the world.

Its remoteness and unique geography kept the Maldives relatively insulated from external influences that fundamentally affected its other South Asian neighbours. In fact, the Maldives was never colonized. The country retains a unique cultural identity, a unique script called *Thaana*, and *Dhihevi*, its national language, incorporates into its vocabulary words from Arabic, Urdu, Hindi, Persian, Sinhalese, Tamil and recently English. All Maldivians adhere to the Sunni sect of Islam, the official state religion. Islamic Sharia law dictates civil

laws and societal norms. In 1968, the Maldives became a Republic, a new Constitution was adopted, and the country came to be governed by a President..

Both per capita income and the Human Development Index fail to capture the extreme vulnerability of the population. While many gains have been recorded in human development, there is still much ground to cover in terms of ending human poverty and deprivations.

Per capita income for the Maldives is not a good indicator of human development. Neither is the Human Development Index (HDI). Both fail to capture the true vulnerability of people, the insecurity of the population, and the extraordinary challenges for ensuring sustainable human development. In 1998, the country reported a real Gross Domestic Product (GDP) per capita of PPP\$ 4,083 – the highest among South Asian countries and almost 20% higher than the average of all developing countries. Similarly, the HDI value for the Maldives (0.725 in 1998) was higher than that of East Asia (0.716) and of even South East Asia and the Pacific (0.691). Despite the relatively high levels of per capita incomes – and the HDI – people of the Maldives remain extremely vulnerable – geophysically and environmentally.

The Maldivian islands are rendered extremely vulnerable by their small size and dispersal across the ocean, and by the natural phenomena of ocean waves and strong winds. Prospects of submersion are high given the low elevation of most islands. Almost 80% of the islands are barely one metre above sea level. Beach erosion is a common problem. There is also tangible evidence of the country's vulnerability to climate change and sea level rise. The International Panel on Climate Change has, on the basis of available evidence, predicted a rise in sea levels of 50 centimetres by the end of the century. This is a matter of great alarm given that even the airport is situated on an island that is barely 1.5 metres above sea level. Changes in monsoon patterns are also beginning to cause increasing damage to houses, schools and other infrastructure.

Added to this, a majority of people remains poor and insecure in the many small and remote islands. They remain deprived of basic amenities and incomes needed to lead a decent life. For instance, the Vulnerability and Poverty Survey (1998) revealed that:

- almost 40% of the rural population live below the income poverty line defined as Rf.600 (around US\$51) per capita per month.
- nearly 15% of the country's population live on incomes of less than Rf. 7.50 per day.
- 28% of Atoll population gets less than 6 hours of electricity per day
- 40% of population lives on islands without a health centre, hospital or private clinic
- 12% of population has no access to safe water.

Since 1998, however, there has been considerable expansion in the physical provisioning of basic social services, particularly in the Atolls.

Other forms of human deprivations are also prevalent in the Maldives. For instance:

- Malnutrition among children remains high, and shows little signs of improvement. In 1995, some 30% of children under five were stunted, 21% wasted and 39% were underweight.
- Opportunities for pursuing even secondary school education are limited. It is often necessary for children to move out of their home islands if they wish to study beyond the primary level.
- There are no degree-awarding institutions in the Maldives. As a result, students need to go abroad to obtain degrees – and very few are able to do so. Over a 10-year period, between 1990-2000, there have been only 149 students who obtained their Masters degrees abroad, and 18 who graduated from doctoral programmes.
- Employment opportunities in many islands remain almost entirely limited to the fishing sector.

Most of all, opportunities in many of the smaller and remote islands continue to

remain limited – a situation that the government is committed to reverse in the years to come.

The Maldives has recorded an impressive growth in its Gross Domestic Product. And State policies have consciously attempted to channel economic growth into expanding several opportunities for people – and accelerating human development.

There has been an impressive growth in incomes in the Maldives in recent years. Through most of the 1980s, GDP grew on average by 10% per annum. There was a setback to growth between 1990-93, but this was quickly arrested. And between 1995-2000, real GDP grew by 46% - recording an annual average growth rate of over 8%. Prudent fiscal management has also enabled the country to contain inflation, keep fiscal deficits under control, double merchandise exports between 1993-98, and reduce the debt-service ratio sharply in recent years.

Effective policies have been put in place to ensure that the benefits of growth are channeled into assuring people many of the basic social and economic rights. Between 1988-91, the Government consciously stepped up investments in the social sectors particularly in health and education. In 1999, social sectors accounted for almost 41% of the government's total public expenditures.

Several benefits have accrued as a result. Noteworthy, for instance are:

- immunization coverage rates exceed 95% for all antigens,
- the move towards rapidly achieving a polio free status.
- every inhabited island has at least one primary school, and most of them offer classes up to Grade VII.
- telephone connectivity has been established in every island.

The benefits of growth and human development in the Maldives have not been equitably distributed.

Progress however has been uneven in the Maldives. Male, the capital city, has benefited the most from the rapid expansion

in economic and social opportunities. Equal gains are yet to reach many of the Atolls and especially the smaller and more remote islands. For instance:

- Life expectancy in Male is around 77 years; in the Atolls, life expectancy at birth is around 70 years.
- Educational opportunities for pursuing schooling beyond Class VII do not exist in many island schools.
- Nearly 25% of the country's poorest population – those living on less than Rf. 7.50 per capita per day – live on 19 islands that are spread throughout the Republic.

However, Male, despite being more affluent, is not without its set of human development concerns. The quality of life is constrained by a severe shortage of physical space. Male also suffers from serious problems of over-crowding, congestion, and pollution. Children rarely have room for recreation and play. Crime and drug abuse are commonly reported.

Women in the Maldives enjoy many freedoms and have recorded significant gains in human development. However, they still live in an unequal world.

A striking feature of the Maldives is the virtual absence of gender differentials along key indicators of human development.

- Female life expectancy at birth as would be expected in situations where there is no serious anti-female bias, exceeds male life expectancy.
- The literacy rates among women and men are almost identical – 98% for both.

Often described as 'the most emancipated in the Islamic world', women in the Maldives have been given the authority to deliver religious sermons and counseling. Equal pay for equal work is a norm. Nevertheless, women still face unequal opportunities in a variety of spheres. For instance:

- Between 1990-2000, only a third of all Masters and Ph.D. students who graduated from abroad were women.
- Work participation rates among women – 19% in 1998 – are among the lowest in the world.

- Women still remain largely involved in traditional but unpaid tasks of community life.
- Girls are typically denied the opportunity to pursue schooling beyond the primary level since it often involves moving out of the home island.
- Sociocultural and family considerations often deny women the opportunity to pursue employment in tourism. In 1996, of the 5,000 Maldivians employed in the tourism sector, less than 100 were women.
- There are only 5 women out of 50 in the Parliament.
- Less than 15% of senior government positions are held by women.

However, the State is making every effort to achieve “a socially and morally justified partnership of women and men in the human-centred development on the basis of equity and social justice.” The promulgation of the Family Law that assures greater freedoms and equality for women is a major step in this direction.

Exclusion is an important constituent of human deprivation. What makes life even more insecure and inadequate for the people of the Maldives is isolation.

The State has been making special efforts to promote democracy and effective people’s participation in governance. Indeed many of the recent gains in human development are the outcome of people becoming more active in defining and articulating their priorities.

However, establishing an effective system of participation and local governance is a challenge for the Maldives. People’s participation is severely constrained by geo-physical limitations, by the relative insularity of island communities, limited access to information, and restricted transport and interconnections between islands. Nine of the country’s 20 administrative Atolls have less than 10 inhabited islands, and no Atoll has more than 17 inhabited islands. Some 18% of Atoll population has a *dhoni* (boat) that ferries them three times or less a month to Atoll capitals.

A significant feature of the Maldives has been the existence of community organizations – and youth clubs – that have traditionally played a major role in promoting development activities in the islands. More recently, other forms of NGOs have also become active particularly in the field of health, education and environment.

But deprivation on many of the islands manifests itself in the form of extreme isolation. For days on end, communities are cut-off from regular communication. Even during the day, when men in particular leave on their fishing trips, islands are inhabited mostly by women and children – and the aged. Such a situation also arises when men migrate for long periods in search of employment.

The forced separation of family members, including children who often need to go out of the island for secondary schooling, creates its own social dynamics – the consequences of which are not yet clear.

A high dependency on fisheries and tourism makes the economic base fragile and narrow. Small size and the need to protect the environment restrict opportunities for diversification of production. And the country’s openness makes for extreme vulnerability to fluctuations in global fortunes.

The country remains extremely dependent on fisheries and tourism. Tourism, for instance, accounts for 33.3% of GDP (in 2000), one-fifth of total employment, close to 30% of the budgetary tax revenues, and 70% of total foreign exchange earnings from exports of goods and services. Similarly, fishing accounts for 10% of the GDP and provides direct employment to almost 20% of the workforce. The contribution is much higher if downstream production and employment are included. Both tourism and fisheries being export-oriented industries are subject to external shocks.

Apart from the reliance on these two sectors, the Maldives is extremely open to international trade. In 1998, for instance, exports accounted for 19% of GDP and imports for 60% of GDP. Practically everything is imported into the country as

the constraints of small size and geophysical features make domestic production uneconomical and environmentally destructive.

The narrow economic base and the extreme openness of the Maldivian economy make the country highly vulnerable to global fluctuations over which the Maldives can have little control.

Several other constraints make formulating an appropriate human development strategy for the Maldives a formidable task.

Many features of the Maldives make the formulation of an appropriate development strategy an extremely complex task.

Small size: Even by the exceptional standards of archipelagos, the physical geography of the Maldives is extreme. Of the country's 90,000 square kilometres, only 2% is land. Of the 198 inhabited islands, as many as 165 have a land area of less than one square kilometre.

High costs of infrastructure: The highly fragmented population and the small size of the many island communities greatly add to the costs of providing social services and infrastructure. The country enjoys practically no economies of scale.

Ecological fragility: Island ecosystems of the Maldives are among the most fragile in the world. They are particularly prone to human-induced disruptions. On land, there is a high degree of endemism - greater in coral atoll systems and when islands are small. On the other hand, marine biodiversity in coral atolls is very high. Some 1,200 species of fish have been identified as also 50 species of corals and 185 species of algae. The survival of this extremely rich yet complex coral system is threatened by changing patterns of human and natural conditions.

Scarcity of land based resources: The Maldives is characterized by a severe paucity of land-based natural resources. This applies not only to hard minerals – the Maldives has none – but also to such basic resources as water and soil. The Maldives has no rivers, lakes or even streams. Soils

in the Maldives are of extremely poor quality. Land suitable for agriculture is extremely limited and unequally distributed throughout the country.

Higher-than-normal project costs: Planning and implementing development projects in the Maldives requires a different framework of financial costs. To begin with, the appropriate 'green' technologies needed for even assuring people access to basic social services tend to be expensive. Further, the inadequacy of land-based resources implies that the Maldives is without durable building materials. There are neither rocks nor clays, and the country has not been able to afford experimentation with new types of possible building materials. Any type of construction therefore requires imported materials – and this tends to be expensive. Third, sea transportation is not only difficult and hazardous; it also tends to be more expensive than routine ground transportation. Fourth, establishing systems of support, supervision and performance monitoring become complicated as people need additional resources and time to travel for many days to visit remote islands.

Limited availability of skilled personnel: The Maldives has achieved high rates of adult literacy and universalized primary schooling. There is however a severe shortage of people whose educational attainment is above the basic levels of numeracy and literacy. Many qualified people also find the salary structure and working conditions, especially in the islands, unattractive. As a result, the economy is dependent on a large number of expatriate workers. There are over 27,000 expatriate workers in the Maldives today – up from 16,744 in 1997 – engaged mostly in tourism, education and health, construction, apparel and other business activities.

The Maldives has formulated a National Vision 2020 that assures every citizen social justice, equality and a decent standard of living.

Human development in the Maldives ultimately depends upon how secure its people are, how well its environment is preserved and nurtured, how fast the aspirations of its young people are fulfilled,

and how effectively the benefits of economic growth are translated into lasting investments that improve the quality of life. The geography and vulnerability of the Maldives, however, make these seemingly common approaches to human development quite complex and formidable. Accelerating human development in the Maldives is not a challenge just for the country, but for the entire global community that is obliged to protect and nurture the extraordinarily rich

natural and environmental resources of this unique island nation.

Concerted public action is needed to focus on ensuring balanced development, enlarging employment opportunities, safeguarding environmental resources, and putting in place a responsive system of governance.

THE STATE OF HUMAN DEVELOPMENT

The very mention of the Maldives conjures up images of remote, palm-fringed islands with white beaches, turquoise lagoons, submarine coral gardens and a breathtaking diversity of sea life. Traditionally, a sea faring nation, the population of which is less than one-third of one million, the Maldives threw open its doors to international tourists only some two decades ago. Today, tourism and fisheries constitute the two strongest pillars of the country's economy. Strategic investment of public resources has resulted in remarkable improvements in the Maldives' basic indicators of human development. But many developmental challenges, some quite formidable, persist. Many of these challenges are imposed by the smallness and scatter of the islands, their geo-physical make up, and the widely dispersed nature of the population. Long distances and poor accessibility of island communities as well as variable weather conditions have resulted in significant differentials in developmental levels between the centre and the periphery.

The Maldives atolls and islands are located in the Indian Ocean to the south-west of Sri Lanka and India. Satellite maps of the Maldives are available. However, the exact number of islands that make up the country is changeable. It depends upon the weather and tides as ocean currents and storms not only change the size and shape but also create new islands. Officially 1,190 islands make up the Republic of Maldives; only 198 of these are inhabited. These islands form a chain of 26 natural atolls that stretches across the equator and is 823 km in length and 130 km at its widest point. The islands cover an area of more than 90,000 square km of the Indian Ocean.

Provisional figures from the 2000 Census indicate that the Maldives has a population of 270,101. The Maldivian population is uniquely distributed; 74,069, or some 27 per cent live in the capital city island of Male' (of this number 4291 live in Male's "suburb island" Villingili). With a land area of only 2 square kilometers and a population of close to 75,000, Male's population density exceeds 37,000 per square kilometer – making it one of the most densely populated cities in the world. Outside of Male', only 6 islands have a population of over 3000, the largest being Hithadoo in Addu Atoll with 9461 people. Almost 71 per cent of all inhabited islands have a population of less than 1000. This distribution pattern gives the Maldives an extremely dispersed and fragmented population with few parallels in the developing world.

Early History

Its remoteness and unique geography kept the Maldives relatively insulated from external influences. Unlike all its neighbours, the Maldives was never colonized but it did have the opportunity to absorb elements of different cultures through the course of its history. There is evidence of habitation on the islands of the Maldives going back more than 5000 years. Aryan immigrants from India and Sri Lanka are believed to have settled in the Maldives during the 4th and 5th century BC. Throughout its history, the Maldives has remained an independent state except for brief periods of invasion and control. The Portuguese briefly occupied the country in the mid-sixteenth century. Portuguese control ended in 1573 with a revolt led by three brothers

from Utheemu Island in North Thiladhummathi (Haa Alif) Atoll. One of the brothers, Muhammed Thakurufaanu established a new Maldivian dynasty in 1573. Between 1573-1752, the Maldives remained independent. In 1752, South Indian Moplas briefly occupied the country. However, after only 3 months and 20 days, Ghazazee Hassan Izzuddeen ended this occupation. In 1887, the Maldives became a British protectorate but this status did not interfere with the internal self-government of the Maldives. Full independence was secured on 26 July 1965, and the Maldives became a member of United Nations on 21 September 1965.

The system of Government prior to the modern constitutional history of the Maldives had evolved to suit the conditions in the country and independence of the people. Sultans, and occasionally Sultanas (female sultans), controlled the political system, and administered the atolls through a system of atoll chiefs, island chiefs and religious leaders. The Sultan was acknowledged as the source of all-political power and laws as long as he exercised this power in the interests of the people. The people had the ultimate power under custom and tradition of either accepting or rejecting anyone in this position of authority and could dethrone or correct the Sultan if he misruled. The Sultan had different councils to assist and advise him and maintained a militia to secure internal peace and defend the country from foreign invaders.

In 1932, the first written constitution ratified by the then Sultan came into effect. It not only limited his powers but also introduced the principle of elections. A Citizen's Majlis (parliament) was established with elections held to choose representatives. In 1948, the Maldivian constitution was rewritten and soon the sultans were replaced by Prime Minister Muhammed Amin Didi who assumed complete control of government, introducing a modernization programme that included a National Security Service and a government monopoly over the export of fish. The sultanate was abolished in 1953. However, the Sultanate was re-established in 1954 and the 94th and last Sultan was enthroned. A referendum in 1968 voted for a republic and on 1 April 1968 the Sultanate was finally abolished and the Republic of Maldives declared. The country adopted another republican constitution and an Executive Presidency was established. The 11 November 1968 Constitution as amended by the People's Special Majlis between 1970 and 1975 defines the present political system of the Republic of Maldives. The incumbent President, His Excellency Maumoon Abdul Gayoom has been elected for five consecutive periods as head of the State.

Because of the limited exposure to external influence, the Maldives has retained a unique cultural identity, a unique script and a language all its own. The most important cultural influence in the Maldives is the Islamic faith that came from increasing contact with Arab traders. King Dovemi Kalaminja, around 1553-54 AD officially declared Islam to be the state religion. Even today, all Maldivians adhere to the Sunni sect of Islam, the official state religion. Islamic Sharia law dictates civil laws and societal norms. The tenets of Islam help structure the economic, social and political relationships within the archipelago and provide a powerful unifying force for the nation. The Maldives has also maintained traditional systems of health and education.

The Maldives national language Dhivehi is of Indo-Aryan origin but has incorporated into its vocabulary words from Arabic, Urdu, Hindi, Persian, Sinhalese, Tamil and recently, English. The country also has its

own written script called Thaana introduced in the late 16th century. Thaana calligraphy, written from right to left, consists of 24 alphabets and is unique to the Maldives. The distances between the islands mean that minor sub-cultural differences exist among islands and atolls, but these are not very significant given the unifying influences of religion, language and history.

Assessing Human Development

Human development covers the full flourishing of all human capabilities. Regardless of the level of development, some of the essential choices for people are to lead a long and healthy life, to acquire knowledge and to have access to resources needed for a decent standard of living. Other choices range from political, economic and social freedom to opportunities for being creative and productive and enjoying self-respect and guaranteed human rights. (Box 1.1)

Efforts to improve the quality of people's lives in the Maldives started as recently as the 1960s. The pace gathered momentum rapidly in the 1970s. From a human development perspective, the Maldives has made significant gains along several dimensions including health, education, access to basic services, and household incomes.

The Human Development Reports since 1990 have published the Human Development Index (HDI) as a measure of human development. The HDI is a composite index and contains three variables: life expectancy, educational attainment (adult literacy and combined primary, secondary and tertiary enrolment) and real GDP per capita (expressed in purchasing power parity).

Box 1.1

Human Rights and Human Development

Human rights and human development share a common vision and a common purpose - to secure the freedom, well being and dignity of all people everywhere. To secure:

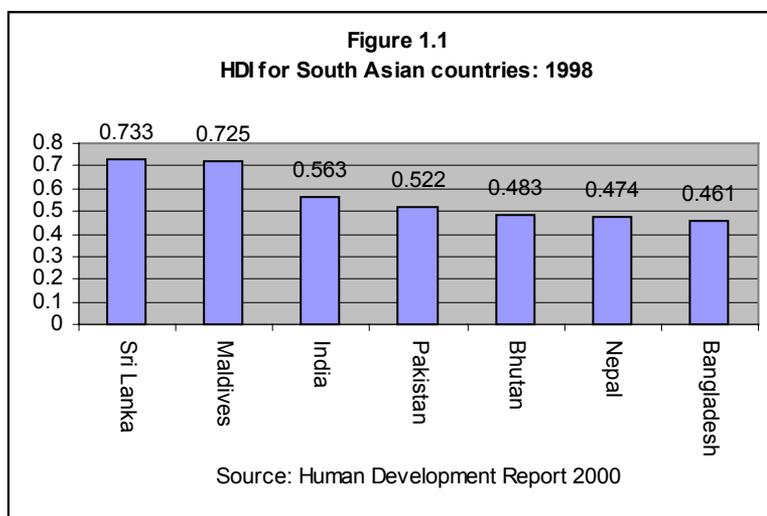
- Freedom from discrimination - for equality
- Freedom from want - for a decent standard of living
- Freedom for the realization of one's human potential
- Freedom from fear - with no threat to personal security
- Freedom from injustice
- Freedom of participation, expression and association
- Freedom for decent work - without exploitation

The *2000 Human Development Report* states that a broad vision of human rights must be entrenched to achieve sustainable human development. It affirms that bold new approaches are needed to achieve universal realization of human rights in the 21st century - adapted to the opportunities and realities of the era of globalization, to its new global actors and to its new global rules. To this end the Report makes seven key statements. These are:

- Every country needs to strengthen its social arrangements for securing human freedoms - with norms, institutions, legal frameworks and an enabling economic environment. Legislation alone is not enough.
- The fulfilment of human rights requires democracy that is inclusive - protecting the rights of minorities, providing separation of powers and ensuring public accountability. Elections alone are not enough.
- Poverty eradication is not only a development goal - it is a central challenge for human rights in the 21st century.
- Human rights - in an integrated world - require global justice. The state-centred model of accountability must be extended to the obligations of non-state actors and to the states obligations beyond national borders.
- Information and statistics are a powerful tool for creating a culture of accountability and for realizing human rights.
- Achieving all rights for all people in all countries will require action and commitment from the major groups in every society - NGOs, media and businesses, local as well as national government, parliamentarians and other opinion leaders.
- Human rights and human development cannot be realized universally without stronger international action, especially to support disadvantaged people and countries and to offset growing global inequalities and marginalization.

Source: Human Development Report 2000

According to the *Human Development Report 2000*, the Maldives was in the category of medium human development countries. With a HDI value of 0.725 for 1998, the Maldives ranked 89th out of 174 countries for which the HDI is computed. Figure 1.1 below shows the HDI for South Asian countries.



The sections that follow discuss achievements and shortcomings along different dimensions of human development.

Improving Health

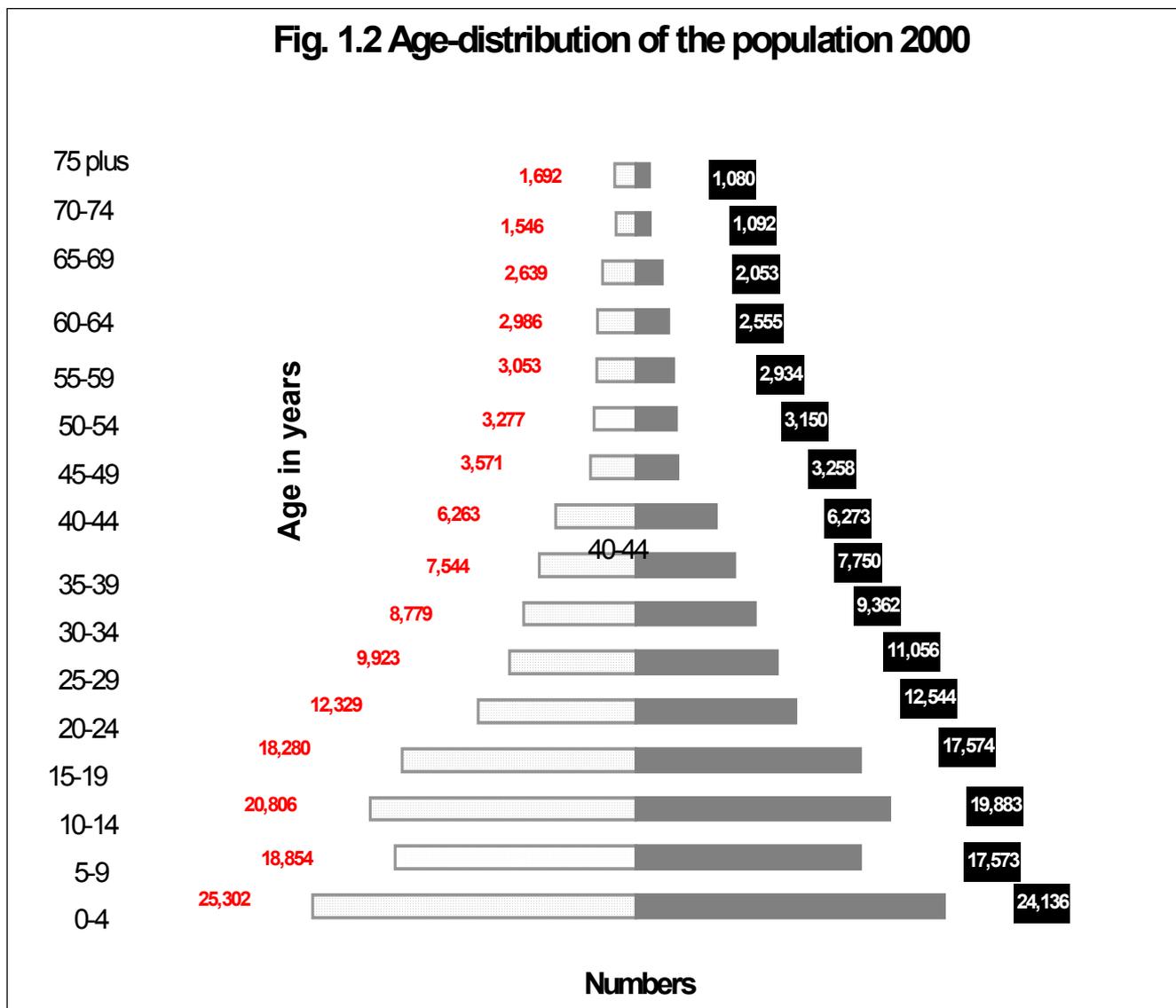
Positive outcomes of the implementation of intensive programmes for the prevention and control of communicable diseases are reflected in the Maldives' rapidly growing population and fundamental changes in mortality and morbidity.

It took almost 66 years for the country's population to almost double from 72,237 in 1911 to 142,832 in 1977. But thereafter, population growth has been rapid. The high rate of population growth has been attributed to high fertility, low contraceptive user rates, and improved health conditions. The growth rate began to increase from the 1960s onwards, reaching a peak of 3.4 per cent per annum in the period 1980-85, since when it started to decline, falling to around 2.7 per cent in 1995. This figure is the highest in South Asia and compares with an average of 2.2 per cent for all developing countries and 2.5 per cent for all least developed countries. It was projected to be 2.6 per cent between 1997-2015. However, provisional census 2000 figures show a slowing down of the growth rate to 1.9 per cent.

Another distinct feature is that the country's population is relatively young. This has resulted from a steady decline in infant and child mortality rates accompanied by a fairly stable birth rate. Nearly 44 per cent of the

country's population is less than 15 years of age. And more than a third of the population is between 16-35 years of age (Figure 1.2). This makes the dependency ratio (ratio of the population under 15 years and over 65 years to the working-age population aged 15-64 years) for the Maldives among the highest in the world.

Fig. 1.2 Age-distribution of the population 2000



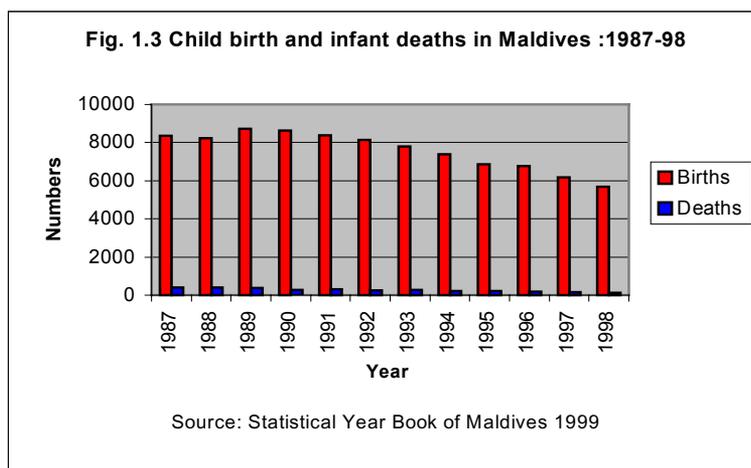
Source: Statistical Year Book, 1999

Life expectancy, which is a reflection of a population's health situation, went up from 43.6 to 70 years in the Maldives during the period 1960-97 (Table 1.1). The increase in recent years has been particularly rapid. The impressive reductions in infant and child mortality have contributed significantly to gains in life expectancy. The infant mortality rate (IMR) in the Maldives was 156 deaths per 1,000 live births in the '60s. According to estimates derived from vital registration data, it is 20 today. (Box 1.2)

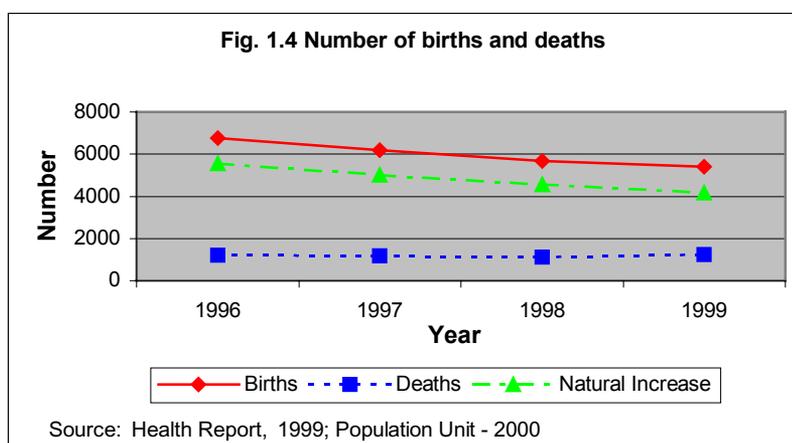
Table 1.1 Life Expectancy at Birth in the Maldives

	1990	1991	1992	1993	1994	1997
Republic	65	66	67	67	69.1	69.62
Male	66	66	67	67	68.9	69.2
Female	64	65	65	67	69.3	70.15

Source: Government of Maldives, Health Report – 1999



In 1999, 5,687 children were born - substantially lower than the figure of 8,364 in 1987. Of the children born in 1998, there were 134 infant deaths – much fewer than the 417 infant deaths reported in 1987 (Figures 1.3 and 1.4). The proportion of infants who die within the first week of birth went up from 41 per cent in 1987 to 51 per cent in 1996, indicating fewer deaths in later infancy.



The significant reductions in infant deaths are partly the result of investments made by the Government to ensure universal immunization. Today, the Maldives reports an immunization coverage rate of 95 per cent for all antigens (Table 1.2). The country is rapidly approaching “polio-free” status. Neo-natal tetanus, pertussis and diphtheria are at the final stages of being eradicated.

Box 1.2
Mortality estimates: Need to reconcile differences

There are two main sources of mortality estimates for the Maldives. The first, published by the Ministry of Health is based on a Vital Registration System (VRS) that forms the basis for estimating life expectancy, infant mortality, birth and death rates. This information is published annually in the Statistical Yearbook of the Maldives and the Annual Health Reports.

The second source for mortality estimates is the Census carried out in 1985 and 1990. There are, however, wide variations in these two estimates.

Mortality estimates for the Maldives					
	Infant mortality rate (deaths per 1,000 live births)		Life expectancy at birth (years)		
	Census based estimate	VRS based estimate	Census based estimate	VRS based estimate	
1985	121	60	50	61	
1990	88	34	56	65	
1995	72	32	60	70	
Source: Vulnerability and Poverty Assessment (1998)					

In 1995, whereas the VRS reported an IMR of 32, the Census based estimate of IMR was more than double – 72 per 1,000 live births. Similarly, according to the Census-based estimates, consistent with the higher IMR, life expectancy at birth was 60 years – some 10 years lower than the VRS based estimate of life expectancy at birth.

Additional mortality estimates for 1997 have been worked out using sample survey data from the Vulnerability and Poverty Assessment (VPA). The VPA estimates seem to be more in line with the Census estimates – and reveal IMR rate that are higher and life expectancy estimates that are lower than the VRS estimates.

Mortality estimates for the Maldives: 1997			
	Infant mortality rate (IMR) (deaths per 1,000 live births)		Life expectancy at birth (years)
	VRS estimates	VPA estimates	
	62	27	62
			70
Source: Vulnerability and Poverty Assessment (1998)			

Estimates of infant mortality according to the VPA are 62 whereas the VRS reports a figure of 27 – less than half.

Errors are likely in both the VPA survey data as well as in reporting during the Census. Similarly, the Vital Registration System may also suffer from incomplete coverage and institutional weaknesses that could give rise to unreliable estimates. In any case, the discrepancies are extremely large – and certainly need to be reconciled.

There is nevertheless a consistent trend that shows dramatic improvements. Using the VRS estimates, for example, between 1985-95, IMR fell from 121 to 72. Similarly, the Census based estimates reveal that over the same period, between 1985-95, IMR fell from 60 to 32.

The United Nations uses a different set of figures that are more in line with the Census based estimates – and therefore somewhat closer to the VPA estimates.

	Life expectancy		Infant mortality rate		Under-five mortality rate	
	At birth (years)		(per 1,000 live births)		(per 1,000 live births)	
	1970-75	1995-2000	1970	1998	1970	1998
Maldives	51.4	64.5	157	62	255	87

Source: Human Development Report 2000

The differences in mortality estimates need to be reconciled.

Source: Vulnerability and Poverty Assessment 91998) and Human Development Report (2000).

Table 1.2 Immunization coverage (%) in Maldives, 1991, 1995, & 1998

	1991	1995	1998
BCG	99	99	99
DPT 3	94	99	97
Polio 3	94	94	95
Measles	96	94	98
Tetanus	89	96	94

Source: Health Report - 1999

Reductions in maternal mortality have also contributed to the increase in life expectancy. Between 1988-98, the maternal mortality rate fell from 400 per 100,000 live births to 158. The total number of maternal deaths has been reduced to a third – from 33 in 1988 to 11 in 1998. Causes related to pregnancy and childbirth accounted for 1.02 per cent of all deaths in 1997 and 0.70 per cent in 1998 (Health Report, 1999). Although maternal mortality has reduced considerably, greater efforts to expand reproductive health care would lower maternal deaths even further.

Priority areas in disease prevention and health promotion include tuberculosis (TB), HIV/AIDS, reproductive health, heart disease, respiratory diseases, drug abuse, cerebro-vascular diseases, kidney disease and cancer. "Lifestyle" diseases, which arise from dietary changes (including the increased consumption of high cholesterol food), lack of exercise and excessive use of tobacco, are becoming more common in the Maldives. The country has one of the highest incidence in the world of the hereditary blood disorder thalassaemia. About one in six Maldivians is a thalassaemia carrier and 60-70 children are born every year with the disease. The total expense involved in the treatment, including frequent blood transfusions, of thalassaemia patients is extremely high; estimated at US\$ 3000 annually per child.

Diarrhoea, intestinal parasites and skin infections contribute extensively to child morbidity. Diarrhoea case fatality rates have decreased because of intensive efforts to educate the public in the use of oral rehydration therapy; however, diarrhoea morbidity has not decreased significantly and continues to be a major concern. The case fatality rate due to diarrhoea in 1998 was 0.09 per 1000 down from 4.06 in 1988. Worm

infestations are another area of concern as they result both in diarrhoea and the high level of anaemia in the country. Mass deworming in two islands resulted in a reduction in the prevalence of worm infestation from 98.1 per cent to 68.8 per cent in 1995-96. Recent estimates indicate that 50-75 per cent of children below five years of age are affected by intestinal parasites.

Acute respiratory infections (ARI) are common among children and adults and contribute to a number of lost work days among the latter category. There are no reliable data to show the exact extent of the disease in terms of the morbidity and mortality profile. In some regions doctors estimate that as many as 60 per cent of children attending hospitals are diagnosed as affected with ARI. It is also estimated that about 18 per cent of the deaths in children 0-4 years of age are due to pneumonia. Asthma, aggravated by coral dust and ascaris infections, is a very common problem among all groups.

Other communicable diseases such as leprosy, malaria and filaria are under control. While the incidence of TB has declined (1.15 per 1000 population in 1991 to 0.33 in 1998) it continues to be a challenge to the health sector. The main contributing factors to the spread of TB include overcrowding and concealment of the disease due to the attached stigma. Tuberculosis is expected to escalate with the emergence of new diseases such as HIV/AIDS. During the period 1991-95, the number of HIV positive and AIDS cases reached a total of 10 cases. Since 1996, all expatriate workers are screened for HIV. Because of the lack of diagnostic facilities at the atoll level, sexually transmitted diseases (STDs) are not often properly diagnosed. While condom use has increased, difficulties and sensitivities related to providing explicit information and promoting condom use hamper the process of change in sexual behaviour needed to prevent these diseases.

Cardiovascular disease related morbidity and mortality is the highest; stroke, hypertension and ischemic heart disease accounted for 31.8 per cent of total deaths in the Indira Gandhi Memorial Hospital (IGMH) in 1994-94. A significant proportion of those affected are of productive age resulting in loss of income in addition to the expenses of health management. The increase in the standard of living has led to the introduction of labour saving devices which has cut down the amount of exercise that an average Maldivian usually did. Changes in food habits with an increased intake of fatty and sugar rich foods further aggravate the situation. Smoking is considered to be a major contributor to cardiovascular disease. Among smokers males account for 90 per cent; about 5 per cent of smokers start during their school years.

Absence of specialized data on diabetes and cancer makes it difficult to estimate the prevalence of these diseases. Extrapolating from the situation in developing countries it is estimated that 900-1000 patients would be under treatment for cancer at any given time. With the high rate of tobacco use, both smoked and chewed, lung and oral cancers are expected to increase. Diabetes is also emerging as one of the leading causes of death. Of 173 deaths recorded in IGMH during 1994-95, 13 per cent were from diabetes. Chronic renal failure requiring renal replacement therapy is another major area of concern. It is estimated that about 30 new cases of chronic renal failure will be diagnosed every year.

Drug abuse is on the increase. The majority of drug abusers are adolescents residing in Male'; many are school leavers or drop outs. It is anticipated that drug abuse will soon be highest among the 12-20 age

group. Some cases have also been reported from the islands. Mental health and rehabilitation services for those with mental, physical or sensory disabilities are lesser developed areas in the health sector.

Women's Health Women have benefitted from improved health services in the country. In Male, and across all the atolls, female life expectancy at birth, as would be expected in situations where there is no discrimination in care, exceeds male life expectancy. For the country as a whole, female life expectancy at birth is 70.15 years and male life expectancy is 69.62 years. The availability of specialized data on women's health is limited. However, recent surveys on women's reproductive health provide much useful information

Reproductive health problems arise from early marriage and early child bearing, putting both the mother and the infant at risk. In the Maldives the average age of marriage is 16 years and a good majority become adolescent parents leading to health problems in both children and parents. In 1998, 12 per cent of births took

Table 1.3 Contraceptive user rate by Atoll, 1996-1998

Year	1996	1997	1998
Republic	16.6	18.1	18.5
Male	13.4	13.3	13.6
Atoll	7.4	7.9	10.8
Lowest	(Gaaf Alif)	(Gaaf Alif)	(Gaaf Alif)
Atoll	32	33.2	34.1
Highest	(Meemu)	(Meemu)	(Kaafu)

Source: Government of Maldives Health Report - 1999

place among mothers who were less than 19 years old. Unsafe sexual relations in adolescents are increasing in the country, exposing them to early and unwanted pregnancies, induced abortions in hazardous conditions, and sexually transmitted diseases, including HIV infection. Unofficial information from the community indicates that there have been deaths due to unsafe abortions. The number of adolescents who get sentenced for premarital sex is an indication that adolescents are sexually active. The majority of those sentenced for pre and extramarital sex are adolescents.

In general, women spend a significant part of their adult lives bearing and caring for children. The improvement of child health services and the containment of several communicable diseases have reduced significantly the burden on women. Estimates from the 1995 census report a total fertility rate (TFR) of 5 per woman. Whilst there has been a reported reduction in TFR, women still tend to have children from an early age, the average age of first

delivery being 18 and continue late into life resulting in a high fertility rate. By the end of 1994, contraceptives were widely available to married couples through the health services (Box 1.3). Despite efforts to reduce the size of

families modern method contraceptive user rates remain low at 18.5 per cent because of inadequate access, cultural misconceptions and women's limited control over fertility decisions (Table 1.3). However, according to the 1999 Reproductive Health Baseline Survey (UNFPA), the contraceptive prevalence rate for women 15-49 years was 32 per cent for modern methods of contraception. The same survey found that the mean number of children of surveyed women aged 15-49 years was 4.2 and the mean "ideal number" of

Box 1.3

Islam Does Not Prohibit Effective Family Planning

His Excellency Mr. Maumoon Abdul Gayoom in a Presidential Address at the Inaugural Session of the *National Conference of the Maldivian Child* (July 1991) said, "It is now known that longer intervals between births could often reduce the toll of deaths among mothers and children, and improve their overall health. In this connection I would like to emphasize the fact that Islam does not prohibit the effective planning of family size or the use of contraceptives for that purpose. There should, therefore be no hesitancy on any religious grounds to use contraceptive methods in carrying out our child spacing and family planning programmes."

children mentioned by these women was 3.0. More than two-thirds of married women (68%) did not want more children, yet 42 per cent were not using any modern form of contraception. The “unmet need” for contraception was higher in older women.

Between 1997 and 1998 the percentage of deaths due to causes related to pregnancy, child birth and puerperium fell from 1.02 to 0.70. About 50 per cent of all emergency medical evacuations are obstetric. An estimated 25 per cent of maternal deaths are due to haemorrhage, sepsis, hypertensive disorder of pregnancy, obstructed labour, unsafe abortions (abortion is prohibited by law unless medically required; there is little recorded evidence about who conducts unsafe abortions) and the result of conditions aggravated by pregnancy, such as malaria, iron deficiency anaemia, hepatitis, tuberculosis and heart disease. A majority of women who suffer from these ailments survive. However, the quality of their life is greatly lessened since they are afflicted with acute or chronic ailments as a result of these complications. Many such women have to live with debilitating conditions including reproductive tract infections, obstetric fistulae and prolapse, which may result in rejection by their husbands and families. Many women are left to fend for themselves and their children alone. Most of these conditions could be prevented if women were provided with improved antenatal, delivery and postpartum care.

In recent years health awareness programmes in the rural areas and information dissemination have incorporated a gender perspective. However, it is found that men pass the responsibility of attending health clinics and focus group discussions held for family health and welfare to their wives. More stress is now being laid on husbands' participation in these programmes.

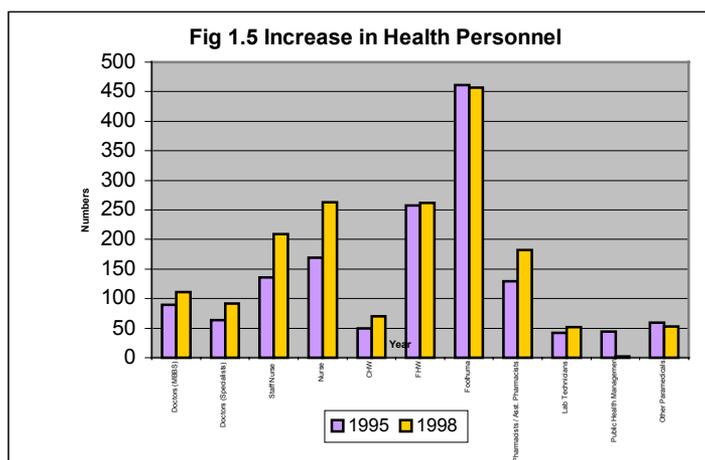
Access to Health Care The smallness and fragmentation of small island nations present many challenges for the delivery of health services, the most critical one being high cost. The Government of the Maldives is committed to the goals of Health For All and recognizes the Primary Care Approach as the most appropriate to reach its goals. It's vision is to ensure that "all Maldivians will have the knowledge and skills required to protect themselves from ill health and have access to effective and affordable health care that enhances their quality of life and enables them to lead a healthy productive life." A network of health services has been set up throughout the Maldives (Table 1.4 and Figure 1.5). There is a tertiary referral hospital, the Indira Gandhi Memorial Hospital, and other specialized institutions at the centre. The 200-bed IGMH is responsible for providing tertiary level curative services. Each of 5 regional hospitals serves 2-4 atolls and provide secondary level curative and preventive services. The five regional hospitals provide diagnostic, obstetric and surgical care. The Atoll Health Centres staffed by Community Health Workers provide basic preventive and curative services. By 1998 all atoll health centres had a labour room and a labour ward. The Island Health Posts staffed by midwives and Family Health Workers deliver grassroots basic health services. The health sector aims to ensure that for specialist and emergency services, islanders do not have to travel longer than 2 hours to reach a regional hospital or Atoll Health Centre.

Table 1.4 Expansion of Health Facilities in Maldives

	1965	1970	1975	1980	1985	1990	1995	2000
Health Posts	0	0	0	0	0	0	1	13
Women's Centres	0	0	0	0	0	0	6	10
Atoll Health Centres	1	9	12	17	20	23	27	37
Regional Hospitals	0	0	0	0	3	4	4	5

Source: MOH, 2000

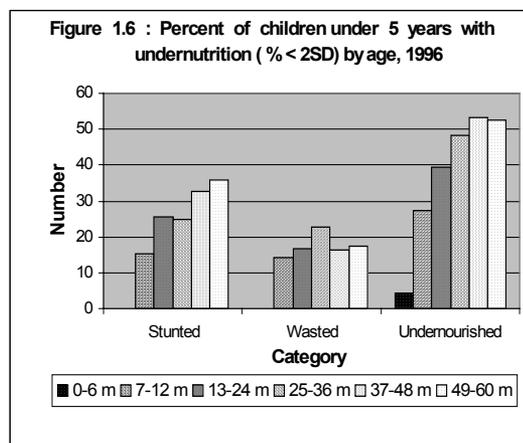
Acute scarcity of skilled personnel and a high dependence on expatriates, have been the major constraints for the sustainable delivery of health services in the Maldives. Local training of health personnel was initiated during the late 1950s and has culminated in the establishment of the Institute of Health Sciences (IHS). The ability of IHS to meet the health personnel needs of the country is greatly hindered by a shortage of qualified teachers, teaching aids and books, and practical training opportunities.



Source: Government of Maldives, Health Report - 1999

Meeting the human resource needs of the country is further hindered by the limited availability of trainable personnel. Although the number of students completing secondary school has been increasing over the last few years, the health sector faces stiff competition from other more attractive sectors. A large part of the training requirements of the the Maldives health sector has to be met in overseas institutions.

Malnutrition Surveys conducted in 1995 and 1996 demonstrate clearly that child malnutrition remains a problem in the Maldives. Stunting varies between 30-36 per cent, wasting between 11-17 per cent and underweight between 39 and 51 per cent (Figure 1.6). Weight curves show a wide deviation from the expected growth patterns after five months of age (ibid.). According to the Vulnerability and Poverty Assessment (UNDP, 1998), more girls than boys were stunted and wasted. Many factors including dietary habits and preferences, inadequate access to health care, poor infant feeding, childcare and hygiene practices, and the high incidence of certain infections account for the prevalence of malnutrition in the Maldives. Dependence on food imports, their irregular supply and high costs, restricts the consumption of vitamin and mineral rich foods. For example, of all the



Source: Health Report, 1999

fruit and vegetables imported into the Maldives, which are very expensive to start with, the largest proportion goes to the tourist resorts, the second largest proportion goes to Male' and the islands get only a tiny amount - some of them nothing at all.

There is a high prevalence of anaemia. Anaemia is attributed to inadequate consumption of iron rich foods and inadequate iron absorption for various reasons, including worm infestation. Anaemia contributes significantly to maternal mortality. Approximately 52 per cent of children, 68 per cent of pregnant women and 62 per cent of non-pregnant mothers have haemoglobin below the WHO accepted standard.

An detailed study conducted in 1995 indicated that iodine deficiency is a problem. The total goitre rate is 23.6 per cent of which 22.5 per cent was classed as Grade 1. The study also indicated a urinary iodine concentration below 10 $\bar{\mu}$ /dl in 67.5 per cent of the sample population, indicating the presence of mild to moderate iodine deficiency. Insufficient iodine is associated with diet, cooking techniques and lack of iodized salt. The absence of legislation and regulations on types of salt imported and level of iodisation as well as the absence of a monitoring system at the importation, retail and island levels predispose the consumption of non-iodized salt. Action to prevent IDD in the Maldives requires among other things, a detailed assessment of the situation, enforceable legislation and a comprehensive public awareness campaign that distinguishes between non-iodized crushed salt for fish processing and refined iodized salt for cooking.

A health survey conducted in 1983 reported 47 per 1000 children affected with Vitamin A deficiency. By 1993 the National Nutrition Survey reported only one child with Bitots spots in a sample of 2053 less than 5 year olds. UNICEF's 1994 Situational Analysis concluded that vitamin A deficiency is now "believed" to be eliminated. There are however, unconfirmed reports of cases of night blindness in some parts of the country. A full assessment of the status of Vitamin A deficiency using biochemical analysis is needed to establish the definitive situation.

Expanding Education

The expansion of literacy in the Maldives has been impressive. Even in 1970, the country reported an adult literacy rate of 87 per cent - significantly higher than the average of 48 per cent for developing countries. By 1998, adult literacy rates had touched 98 per cent - comparable to the levels found in many industrialized countries of the world.

Access to primary education has increased dramatically in recent years, and today, every inhabited island has at least one school. Traditionally, Maldivians have placed a high priority on education and the public demand for basic education is very strong. The Maldivian formal school system consists of Government schools, Community schools and Private schools.

The traditional system of education consisted of children gathering in homes called *edhuruge* to learn from respected members of the community, the Holy Quran, Dhivehi language and the Arabic script. The age of children ranges between 3-15 years. Despite the introduction of modern types of schooling the *edhuruge* still survives and provides the first formal learning for more than half the population of the country. Another component of the traditional system which still exists was that of Island Community Schools. These schools are established and managed by island communities. Funds are provided by the community members through people's accounts or through *ad hoc* fund raising. Some of these schools receive government

grants. Community contributions also come in the form of voluntary labour for construction, part time or full time teachers and various donations in cash or kind. In 2000, 51 per cent of school children were enrolled in government schools, 40 percent in community schools and only 9 per cent in private schools (Table 1.5).

Table 1.5 Distribution of Enrolment by Type of School (March 2000)

Community	40%	42352
Private	9%	9591
Government	51%	53413

Source: Educational Statistics, 2000

The first government school was established in Male' in 1927. By 1945, each inhabited island had a traditional school *maktab* providing instruction at the lower primary level. A dramatic change in the education system occurred in 1960 when the Government introduced two English medium schools in Male' as part of a conscious effort to prepare its citizens to meet the increasing development needs of the nation. In 1978, it was decided to move to a unified national system of education to promote more equitable distribution of facilities and resources. The policy focus was on providing Universal Basic Education for All and strategies included the formulation of a unified curriculum for Grades 1-7, improvement of teacher training and the establishment and upgrading of new schools in the atolls. Two government schools, one Atoll Education Centre (AEC) and one Atoll School were established in each atoll as model schools to provide a curriculum to the children on the atolls similar to what was offered in Male' schools. Additional functions included in-service education of teachers and literacy work.

In Male', the basic cycle is preceded by a 2-year cycle of pre-primary education (lower and upper kindergarten years). Pre-primary education, which focuses primarily on reading and writing skills, is also becoming common in highly populated islands of other atolls. In the atolls early childhood education is provided by the *edhuruge* and is part of the government strategy to encourage home-based and community based approaches to early child development (Box 1.4). Currently there are 148 pre-primary schools in the country, with an enrolment of more than 13,000 children.

Box 1.4

First Steps: An Innovative Program for Early Stimulation

In the Maldives, early childhood care and development is understood typically in terms of "preschool education". In general, the concept and importance of the first three year of life, is absent. The First Steps project, a premier initiative in the Maldives, focuses on the child's cognitive, social and emotional development in the age group 0-3 years and the simple and practical interventions that can be provided by parents and other caregivers in the extended family. Based on the indigenous culture and traditions, the program is designed to address the child as a whole; to build the self-confidence of caregivers who, it is expected, will in turn build the self-esteem and confidence of their children; and, to involve men as well as women as positive role models for and nurturers of young children. Strategies include developing and distributing attractive print materials, books and posters to households, using the mass media and selected community level workers to provide information directly to caregivers, as well as to receive feedback and suggestions from them, and integrating a holistic understanding of ECCD into the pre-service and in-service training of health workers, teachers and social workers.

Source: ECCD Strategy Paper, UNICEF-The Maldives, 1999.

The pre-primary schools are administered entirely by the private sector. However, the government organizes and provides teacher training (of two months; provided by the Non-formal Education Centre) and sometimes teachers' salaries (in Male' only). Pre-schools in Male' are supervised by the Supervision and Co-curricular Activities Section of the Ministry of Education.

The Fifth National Development Plan declared that the "highest priority will be placed on ensuring that all children in all locations enter school and complete a basic learning cycle of 2 years by the year 2000." The Maldivian formal school system consists of Government schools, community schools and private schools.

Table 1.6 No. of Schools by Level

Pre-primary	148
Primary	230
Middle	222
Lower Secondary	74
Higher Secondary	2

Source: Education Statistics, 2000

As of January 2000, primary education is a 7-year cycle which children in the Maldives are expected to begin at age 6. In 2000, there are 230 primary schools (Grades 1-5) and 222 middle schools (Grades 1-7) in the country (Table 1.6). For primary education, Grades 1-7, universality of availability (if not full participation) is a near reality. Almost all eligible children are enrolled in primary education. In 2000, 46 229 children are enrolled in Grades 1-5 (as compared to 51 220 in 1996) and 27 293 in Grades 6-7 (Table 1.7). These figures show that stagnation in Grades 1-5 is reducing progressively. However, the Gross Enrolment Ratio of 123.4 per cent (1998; latest available figure) suggests that there continue to be a number of over- and under-age children enrolled in primary education. The Net Enrolment Ratio is 92.7 per cent.

Table 1.7 Enrolment trends by level, 1996 and 2000

	1996	2000
Pre-primary (NURS,LKG,UKG)	10530	12894
Primary (Grades 1-5)	51220	46229
Middle (Grades 6-7)	18267	27293
Lower Secondary (Grades 8-10)	8127	18254
Upper Secondary (Grades 11-12)	307	638
Total	88451	105356

Source : Educational Statistics ,1999 & 2000

The major internal efficiency concerns are dropouts and learning achievement (Box 1.5). The number of drop outs has declined in recent years. Rather than drop outs, the major problem in certain island schools is the "force out" problem which occurs when educational opportunities beyond the basic cycle are not available on the home- or a nearby island. Many students participating in "special classes" or repeating final grades, are there because there are no further formal schooling opportunities available. Automatic promotion is a feature of primary education and the survival rate to

Box 1.5
The 22-Schools Project

Although school enrolment is universal, the quality of education, and gender and geographic disparities continue to be challenges within the education sector. The *22-Schools Project*, launched in 2000, aims to address these issues through providing basic resources and training inputs to least served island schools in the country with a special focus on continued education and skills development. It also aims to improve the quality and level of girls' education the focus is on girls' completion of the basic education cycle, access to transition into secondary or alternative forms of education, and awareness raising to eliminate gender gaps. Project activities include professional development of teachers, with a focus on multi-grade teaching and gender issues. Head teachers will be trained in resource and facility management, curriculum management and student services, and school health services including adolescent girls' reproductive health. Strategic resources for curriculum implementation will be provided. Teacher exchange between under-privileged schools and Male' schools will be facilitated. Special attention will be given to promoting general community awareness and parental awareness with particular attention to early childhood care and development.

Source: Basic Education for Disadvantaged Children - Project Document, UNICEF, Male', 2000

Grade 5 is 98.3 per cent. The automatic promotion policy has shifted repetition from Grades 1 and 2 to Grades 5, 6 and 7 where the costs of repetition are often higher. The fact that the students in Grade 5 may fail to have even basic literacy and numeracy skills suggests that automatic promotion is likely to work better if continuous assessment is well established and used effectively for in-school remediation. There are no standardized measures of achievement and given the variable capacities among schools for in-school assessment of core curricular competencies at the primary level have been difficult to assess. However, the results of various studies, including the latest *Monitoring Learning Achievement (MLA) Project, 1999*, indicate that learning achievement is very low, pointing to the need to improve the quality of primary education.

Wastage and stagnation can to a large extent be explained in terms of the quality of education. Among the well acknowledged for low quality education are the often poor teaching, the limited availability of teaching-learning materials, inadequate and poor quality school facilities, and poor quality management of community schools.

In public primary schools, education is free. However, parents have to bear the costs of textbooks and school uniforms. The practice in community schools is flexible. Parents' indirect costs may involve moving their entire households to Male' to register their children in Government or Ward schools where they believe their children will have a better chance for admission to subsequent levels of education. Their direct costs include uniforms, books and supplies, tuition (which is almost universal in Male') as well as fees if the school is a private or ward school.

Secondary education in the Maldives consists of Grades 8-10 (lower secondary) and 11-12 (upper secondary). Lower Secondary, once the monopoly of Male' institutions is now being extended to the atolls through the gradual addition of Grades 8-10 in some Atoll Education Centres (AEC) and Atoll Schools (AS). A standardized test is administered at the end of Grade 7 to select children to Grade 8 in atoll schools. (Sixty-three of the 76 schools in the country that offer secondary education are in the atolls.) Two regional secondary schools have been set up with overseas loan assistance, one each in the north and the south. GER in lower secondary needs to be raised from its current level of 50 per cent. Upper secondary education remains limited to the Science Education Centre and the Institution of Islamic Studies (which is an Arabic medium school) in Male'. Some private schools in Male' offer A level courses on a subject by subject basis. Female participation rates in education are higher than those for males at all levels except upper secondary. In 1999, SEC enrolled 174 girls and 238 boys.

The increasing demand for secondary education, a direct consequence for the success of the universalization of primary education, will have dramatic implications for teaching requirements and instructional aids, facility utilization, text book needs, and the social demand for upper secondary education as well as for employment commensurate with the Grade 10 and Grade 12 school leavers' expectations.

Dhivehi is the medium of instruction in most atoll schools. In several Male' schools the medium of instruction is English. Even in Dhivehi medium schools, English is taught as a language from Grade 1. The introduction of English as the medium of instruction for all secondary education (bar two schools where the

medium of instruction is Arabic) has been the basis for the current division in society between those who speak an international language and those who do not. Increasingly, post-primary education and employment opportunities favour those who can work in English, Arabic, or another language; the resort-based economy also rewards those with basic skills in other European or Asian languages (e.g. German, Italian, or Japanese).

Between 1978 to 2000 school enrollment rose rapidly from 15,000 to 105,356. Present plans for education emphasize expansion of secondary education, strengthening educational management information system, increasing curricular relevance, and establishing national capacity for secondary teacher education and post-secondary education.

Table 1.8 Teachers by training serving at different levels in Maldives, March 1999

	Trained	Untrained	Temporary
Pre-school	185	63	143
Primary (Grades 1-5)	1345	145	645
Middle (Grades 6-7)	685	119	110
Lower Secondary (Grades 8-10)	651	103	68
Upper Secondary (Grades 11-12)	51	1	-
Total	2933	431	966

Source : Educational Statistics ,2000

The student teacher ratio of 21:1 (at the primary level in the year 2000) in other contexts would be considered extremely favourable. In the context of the Maldives this ratio barely meets the need, as due to the nature of the population distribution, resources have to be provided to each island, in spite of the small numbers residing on most islands. In 1999, 2135 teachers were teaching Grades 1-5 and 914 were teaching Grades 6-7 (Table 1.8). A little over 11 per cent of permanent teachers at both the respective levels are untrained. Most local primary teachers currently in service in the atolls have obtained a one-year teaching certificate after having reached Grade 7. As of the last five years or so the entry requirement for teacher training has been raised to GCO "O" Levels and the length of training is two years. The high percentage of untrained teachers in-service and the logistical difficulties for teachers to travel to Male' to seek professional development opportunities has required the institution of innovative strategies such as the on-site training programmes conducted by the Institute of Teacher Education, which take place in the locations where teachers live and work.

In secondary schools, over 80 per cent of teachers are trained but 74 per cent of them are expatriates (Table 1.9). Due to the heavy reliance on expatriate teachers, the cost of providing secondary education is a serious concern. The high percentage of untrained teachers in-service and the logistical difficulties for teachers to travel to Male' to seek professional development opportunities has led to the Institute of Teacher education conducting on-site training and seminars by travelling to locations where teachers live and teach. It is understood that this programme is improving the quality of teaching considerably.

Table 1.9 Local and Expat teachers serving at different levels in Maldives, March 1999

	Local		Expat		Local & Expat
	Female	Male	Female	Male	
Pre-school	351	33	3	4	391
Primary (Grades 1-5)	1400	616	66	53	2135
Middle (Grades 6-7)	216	307	136	255	914
Lower Secondary (Grades 8-10)	69	152	139	462	822
Upper Secondary (Grades 11-12)	9	11	5	27	52
Total	2045	1119	349	801	4314

Source : Educational Statistics ,2000

The Education Development Centre (EDC) introduced a national curriculum for primary education in 1984. Since then the EDC has produced over 170 textbooks, workbooks, English and Dhivehi readers, and teachers' guides for primary subjects. In 1999, EDC began a curriculum review process to update the National Primary Curriculum. Broad-based consultation with stakeholders has clearly indicated that the need to make the curriculum more relevant to children's environment, enhance critical thinking through curriculum and incorporate value education into the curriculum. The curriculum of secondary schools is also being reviewed for its suitability to cater to the needs of students in the country. The greatest challenge faced in curriculum revision is the lack of trained personnel.

Improvement of educational quality while sustaining quantitative growth is one of the national objectives of education in the Maldives. The improvement of the quality of the teaching and learning process through Subject Teacher Committees (STCs) is effective in Grades 6 through 10 of schools in Male' under the supervision of the Ministry of Education. The STCs follow an innovative approach designed to supplement, strengthen and improve current practices related to teacher supervision with a view to bring about the professional development of teachers and quality improvement of the teaching-learning process.

A programme for training school supervisors was started in 1994. The aim was to establish a school based supervision mechanism in each school, and to have in each school by the end of 2002, at least one trained supervisor who would act as an instructional leader and who would be able to monitor teacher effectiveness, student achievement, curriculum management and organize and conduct development activities. This training programme is being conducted in the form of workshops phased into 3 levels. By the end of 1999, there were 69 teachers who completed all three levels.

Supervision and distribution of educational materials are severely constrained by the physical geography of the country as well as weather conditions. The large number of widely dispersed, small island populations greatly increase the cost of providing educational services and the necessary infrastructure. A town or city with a population of 260 thousand could be serviced by a single university, a few secondary schools and a limited number of primary schools. Of the total of 301 schools in the Maldives, 233 serve less than 100 to 400 students. The inherent constraints imposed by distant and small populations adversely affect the provision of infrastructure facilities and services.

Youth and adults who have not been able to profit from the formal education system are provided with opportunities to complete extended basic education at an accelerated rate through non-formal education.

Under the Condensed Education Programme implemented by the Non-formal Education Centre (NFEC) out-of-school youth and people beyond school age can complete Grades 1-7 in three years. The NFEC also conducts courses in Thaana and Arabic Calligraphy, Dhivehi, and Thaana typing. Short skills development programmes including Embroidery and Sewing, First Aid, and Carpentry, are also conducted. The NFEC's Early Childhood Care and Education course has contributed significantly to the expansion of preschool education in the atolls. Other institutions such as the Institute of Health Sciences, the Institute of Hotel and Catering Services and the Maldivian Institute of Technical Education also conduct short-term vocational education programmes. In 1999, 349 students participated in various educational programmes of NFEC; of these 245 (70%) were women. Non-formal educational programmes particularly in the fields of population and health education are targeted at students of primary and secondary schools, out-of-school youth, teachers and community leaders and adults.

The Literacy and Neo-literacy Programme was launched in 1980. The NFEC delivers literacy in one atoll a year through a network of volunteers identified by the Atoll Chief. The volunteers provide one-to-one instruction for a two-month period in basic reading, writing and mathematical skills. At the end of the tutorial period, the students take the literacy test. When the programme was launched the literacy rate was estimated at 70 per cent. The one-atoll-a-year process is still in progress and will be continued till the present adult literacy rate of 98.84 per cent reaches 100 per cent. Educational and awareness raising programmes are broadcast both by Voice of Maldives and Television Maldives.

Girls and Education Almost equal numbers of boys and girls are enrolled at all levels of education below upper secondary (Table 1.10).

Table 1.10 Gross and Net Enrolment Ratios in Primary education – 5 Year cycle

		1996			1997			1998		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Enrolment Ratio	GER	126.7	124.2	125.5	125.4	122.3	123.9	125.3	121.5	123.4
	NER	90.2	90.0	90.1	93.2	92.1	92.7
Gender Parity Index	GER	1.0			1.0			1.0		
	NER	...			1.0			1.0		

(GER: Gross Enrolment Ratio; NER: Net Enrolment Ratio)

Source: Ministry of Education, Education For All, 1999

The participation of girls in upper secondary and tertiary education is significantly lower than that of boys (Tables 1.11 to 1.13). Boys also predominate among those who go overseas for higher education. Where larger numbers of girls are enrolled the courses selected are usually gender stereotyped. The main reasons for girls not pursuing higher education include early marriage, financial constraints, unavailability of higher education, and lesser mobility as compared to boys. Gender training is now being incorporated into the curriculum of the Institute of Teachers' Education and the question of preparing gender sensitive textbooks is currently under discussion. Distance education programs are being introduced and more women from the atolls are now gaining access to education

Table 1.11 Males and females by level of educational attainment, 1995

	Males	Females
Primary	38743	39484
Middle	14572	13869
Secondary	7889	6138
Higher Secondary	648	413
Tertiary	2502	1031
Total	98906	96135

Source: Population and Housing Census, 1995

Table 1.12 Student Enrollment in SEC and Maldives College of Higher Education Institutions

Institute	1999		
	Female	Male	Total
SEC	192	265	457
Institute of Health Sciences	476	114	590
Maldives Institute of Technical Education	37	2288	2319
Institute of Teachers' Education	1351	931	2282
Institute of Hotel and Catering Service	52	224	276
Institute of Management and Administration	924	974	1898
Marine Training Centre	2	863	867
Total	3034	5659	8687
%	34.8	65.1	

Source: MWASS

Table 1.13 Males and females who have completed higher education overseas (1990-2000)

Level	Total Number		%	
	Male	Female	Male	Female
Diploma	261	244	52	48
1 st Degree	481	272	64	36
Master's	99	50	66	34
PhD	12	6	67	33

Source: Ministry of Human Resources, 2000

The Relevance of Education The education system is not yet producing enough skilled graduates to meet the Maldives' internal demand. Many school leavers find that they have inadequate or inappropriate skills for the kinds of economic opportunities available. Many jobs now demand higher or specialist education or training than they have attained. Often the education they have received does not equip people with skills required by the jobs. Of great concern in the long term is how the current "O" and "A" level curricula will develop graduates whose attitudes, values, and skills will match those of Maldivian employers in the next decade and beyond. The upper secondary school system is geared to an expectation of students proceeding to tertiary study and yet only a very small minority of these students do so. The formal academic nature of the upper secondary curriculum warrants review to make it more relevant to the needs of the majority of students who will not go on to tertiary study.

The current low output of upper secondary education could easily (but with budget implications) be expanded; however, current graduates do not think of immediate employment as an option and focus instead on higher education opportunities abroad. Even when they take employment with Government, one of their reasons is to gain access to Government controlled opportunities. The size of the country is not large enough to sustain an economically viable tertiary system to produce the high-level manpower the

country needs. Apart from other disadvantages such as relevance of the courses, foreign training is very costly and the country may not be able to bear the cost of foreign training for all who aspire to it.

Income and Employment

Real incomes have been growing steadily in the Maldives – and with that access to resources needed for a decent standard of living has also improved. Between 1987-98, per capita real income went up by 80% - to Rf. 6528 in 1998. To some extent, income estimates for the Maldives tend to be under-stated. A sizeable part of the rural economy, especially in the remote and under-developed atolls – remains non-monetized. At the same time, many activities fall in the informal sector, and hence go unrecognized. This is particularly so with fisheries.

According to the 1995 Census, 52 per cent of the population in the age group 15 - 64 years was economically active. The sectors in which Maldivians are employed include fisheries (19%), hospitality and tourism (11%), manufacturing, transport and communications (Table 1.14). In 1995, almost a fifth of all workers were engaged in community and social service. Of the total of 66945 workers in 1995 only 2289 (3.4%) were in agriculture. Employment in the wholesale and retail trade accounted for a twelfth of all workers. About 19 per cent of workers engaged in the different sectors held government jobs. Formal work in the Maldives is not protected by labour laws and employment benefits are few.

The employment situation in the country is complex. The increase in population is not reflected in the labour force participation numbers because of the young age of so much of the population. Overall unemployment rates are low in the Maldives as a wide range of jobs is available for those who wish to work. At the same time, while the country has a high literacy rate and has universalized primary education, there is an acute shortage of people whose educational attainment is above the basic levels of literacy and numeracy. This makes necessary the continued dependence on expatriate labour to meet the demands of a rapidly modernizing economy. While manual work is available, Maldivians seem reluctant to accept this sort of work and here too large numbers of expatriates from neighbouring countries predominate. Job opportunities are usually centralized in and around Male', which has led to massive in-migration and a deterioration of living conditions on the island. In general Maldivians expect higher wages and better living standards than expatriates which accounts for the large influx of foreign workers.

The total number of expatriates was 27019 in mid-2000 as against 24028 in mid-1999 and 16744 in 1997. Expatriates come from all over the world but mostly from the neighbouring countries of Bangladesh, India and Sri Lanka. These three countries account for 91 per cent of the expatriate population. Expatriates are employed in most industries but are concentrated in tourism and hospitality, construction, business activities,

Table 1.14 Employment in different sectors

Industry	Total Employed	%
	66945	
Agriculture	2289	3.4
Fisheries	12555	18.8
Quarrying	383	0.6
Manufacturing	12082	18.1
Electricity, gas, water	762	1.1
Construction	2795	4.2
Wholesale, retail trade	5336	8.0
Hotels, restaurants, etc	7180	10.7
Transport, communications	6349	9.5
Finance, business service	2035	3.0
Community, social service	12838	19.2
Not stated	2341	

Source: 1995 Census

education and wearing apparel. Of the total number of expatriates, 14 per cent are women. Women, and those mainly from Sri Lanka and to a lesser extent from China, are predominantly employed in the garments industry (32%); the rest work mainly in the tourist resorts or in the education, health and social work sectors. Several expatriates travel to the Maldives with their families. This together with the fact that a great number remit their earnings to their home countries exerts pressure on the Maldivian economy. The growth of foreign workers is an expression of the high expectations of Maldivian labour who in several cases prefer to opt for "voluntary unemployment".

Traditionally, fisheries have been the principal source of livelihood for the vast majority of the Maldives' atoll population, providing employment and much of their nutrition through commercial, artisanal and subsistence fishing. Today about a large part of the local labour force is engaged in the fishing activity itself, and more are employed in downstream processing activities that prepare frozen, canned, chilled/fresh, and salted/dried fish for the export market. Introduction of modern techniques, changing aspirations of educated youth and new opportunities for alternative work have significant implications for employment in the fisheries sector.

Maldivian participation rates are very low in the tourism industry, which is regarded as the growth engine of the country's economy. Foreign nationals, mostly Sri Lankans dominate skilled positions. Bangladeshis mainly occupy low paid jobs. A major issue is the failure so far of being able to attract Maldivian women to work in the resorts. The growth of resort jobs, predominantly in Male' and Ari atolls has attracted economically active men, migrating from the outlying atolls. Many of their families have settled in Male', along with expatriate workers. This adds to the pressure on the capital's resources and has contributed to the resultant escalation of property values and living costs there. Tourism has to a limited extent spawned other economic opportunities such as handicrafts, souvenir shops and reef fishing. These opportunities, however, need to be supported and consolidated.

There is clearly a difference between the aspirations of young people and opportunities for productive employment in their field of interest. One of the most important concern in the country is how to better meet the needs and aspirations of upcoming generations. The proportion of economically active population in the Maldives, estimated at 46.7 per cent in 1985 and 44 per cent in 1990 is the lowest in the SAARC region. The demographic structure of the Maldives is such that the demand for jobs in the years ahead will far exceed the rate of population growth. In the next five years, approximately 26,000 young people will enter the labour market. While some will continue on to tertiary studies, the vast majority - around 5000 annually - will be seeking employment. An additional 35,000 children will be enrolled in primary school, ready to fuel pressure on the labour market. With the number of children and young people currently enrolled in primary and secondary schools far exceeding the number of jobs currently available in the whole of the country, the creation of employment has the potential of becoming of the nation's most critical development challenges.

Other Dimensions of Human Development

The quality of life is affected by a number of factors including the freedoms that women enjoy, the institutions of family, marriage and divorce, the attention that society pays to children and the protection it affords against violence and abuse.

Women: improved situation but diminished position

In general, social perceptions and mindsets have not kept pace with economic change, conventional beliefs especially those that see women as homemakers and men as workers, have been incorporated into modern life (Box 1.6). In the case of women, this results in their peripheralization and a denial of opportunities to earn, to make decisions and to participate in public life. Maldivian society is Islamic but does not practice the segregation of women. In fact women in this country have been described as the “most emancipated in the Islamic world.” It is noteworthy that this

year (2000), three women were given the authority to deliver religious sermons and counseling. Nonetheless, enduring and pervasive traditional beliefs regarding social roles and the division of labour between the sexes inhibit women’s full enjoyment of the opportunities that have been made available through social and economic development and constrain their participation in public activity and national development. In the Maldives, overt forms of gender discrimination are conspicuous by their absence; the opportunity structure is gender equal. Equal pay for equal work is a norm. But, women are viewed as primarily responsible for activities related to the domestic sphere – reproduction, caring for the family and home maintenance. They are socialized for their careers as home makers from an early age. These cultural factors and the distance and dispersal of opportunities for higher education and employment constrain women’s capability of participating equitably in mainstream activities. As a result, significant inequities persist along many critical dimensions of human life.

Early Marriage and Divorce Marriage in the Maldives is almost universal. The mean age at first marriage for women is estimated at 16.8 years (This figure is slightly higher for the Male’ population), this means that one out of every two girls who gets married is less than 16.8 years of age. the Maldivian Constitution defines “child” as an individual less than 16 years of age. According to the Convention on the Rights of the Child, a “child” is any individual under age 18. In line with this latter definition a substantial number of

Box 1.6

Socialized into Womanhood

In 1995, the *Ministry of Youth, Women’s Affairs and Sports*, in cooperation with *UNICEF*, sponsored a survey to assess the status of health, education, self-esteem, aspirations, and the availability of social services for girls as compared to boys. It demonstrated that there is no overt discrimination against girls in the Maldives, but there are several areas where gender differences do exist. Among the total number of respondents (875) interviewed were parents, teachers, Island Chiefs, Island Women’s Committee Members as well as girls and boys. The survey recorded no disparities in health care and school enrolment at the primary level. However, greater numbers of boys had the opportunity for education after Grade 7. The reason given was parents’ reluctance to allow their daughters to move out of their home islands to pursue higher levels of education. Girls were expected to perform a range of household tasks, sons were not. In most cases women and girls ate their meals after men and boys had finished theirs. In general parents wanted their daughters to grow up to be teachers, health workers or hold government jobs and preferred daughters to take up home island based work. While girls thought they were as smart as boys, more girls than boys agreed that it was less important for women to be economically independent. More than half of both boys and girls felt that girls had fewer opportunities for employment than boys. Girls’ aspirations for their future echoed those of their parents. Teachers agreed that girls were more interested in studies and performed better academically than boys; yet more than half maintained that boys were smarter than girls. Island Chiefs and Island Women’s Committee members felt that teenage girls could contribute to the development of the community by engaging in activities such as cleaning the island, teaching, sewing and mat weaving.

Source: Ministry of Youth, Women’s Affairs and Sports, *Girl Child in the Maldives – a survey report*, December 1995.

“children” get married. As of November 2000, the legal age at marriage has been raised to 18 years. Early marriage has a direct negative impact on growing children in the sense that such young parents who themselves are still growing are unaware of the physical and developmental needs of growing infants and children and the protection and fulfillment of their rights. In the absence of widespread opportunities for secondary education, vocational training and other forms of productive engagement, women in the Maldives will probably continue to marry early and will probably continue to have many children.

Although no longer common polygamy is permitted in the Maldives. A man may marry up to four women at the same time. There are no formal restrictions although economic realities and the sex ratio of the population may exert counter pressures. Divorce and remarriage rates in the Maldives are among the highest in the world (Table 1.15). It is not uncommon for an individual to be married up to five or six times, sometimes even 10 times. The number of marriages per person in Male' is slightly lower. Serial monogamy is an old cultural pattern which is said to predate the advent of Islam in the Maldives. A proportion of remarriages takes place among the same couples who were once divorced, so that a person may marry four or five times but have only two or three different spouses. On Male, women as well as men seek divorce fairly frequently, unlike on the atolls. Unlike other women in the region, divorced Maldivian women are not stigmatized. Until recently, Maldivians do not seem to have considered this a serious social problem.

Table 1.15 Marriages and Divorces in Male' and Atolls, 1996-98

	Male'		Atolls	
	Marriages	Divorces	Marriages	Divorces
1996	2250	1522	-	-
1997	2372	1578	2450	1277
1998	2195	1546	2131	1096

Source: Statistical Yearbook, 1999

While in principle either party may choose to end a marriage in practice, culture as well as the legal system gives males an advantage in initiating divorce. Men can divorce their wives by saying so and by registering their decision in the courts within three days. Women can only initiate divorce by going to the courts to petition for a divorce and bringing a complaint against the husband. Both husband and wife's signatures are required to register a divorce. The Family Law enacted in 2000 addresses many social and legal concerns of women.

In terms of modern concepts of reproductive and family health, the problems in such marriage patterns relate to possible detrimental effects on children, high fertility and frequent sexual partner change. Women tend to have children from various husbands; hence at any given point in time, a woman could be living with several children from different husbands. Broken families and situations of “mixed family composition” have been associated with juvenile delinquency, neglect or even abuse of children increasing the psycho-emotional burden for mothers.

In most cases of divorce, mothers automatically have the right to custody of the children under seven years of age unless deemed inappropriate by the intention of the woman to remarry and have other children. Due to the perception that females are responsible for child care, it is normally the woman who bears the responsibility for maintaining and caring for children. Three months following divorce women cease to be entitled to monthly payments from their former husband and to the quarterly clothing allowance. These rates

vary for Male' and the atolls. Women do get a chance to get remarried, but during the waiting period – 5 years on average - they have often to take sole responsibility for child-care.

Child support is required to be provided until children are 16 years old. Support must also be provided for boys over 16 if they are still in school and for girls until they are married. For dependent children the law also stipulates varying monthly payments according to region and the age of the child. Child support levels are considered inadequate and child support is seldom paid. This often leads to early remarriage by women to obtain financial security. As a result, women have less opportunity to go to work and no time to reinvest in their education.

There is evidence of the existence of violence against women. Domestic violence, which includes spousal and parental violence of both sexual and non-sexual nature has been reported. However, reported cases are likely to be fewer as compared to the actual prevalence of violence. Domestic violence is reported rarely because of the widespread belief that a woman should abide by her husband's wishes, the attached social stigma and difficulties in proving abuse in the court of law. Another reason for under reporting is likely to be women's economic dependence. In the absence of alternative means of support a woman who alienates her husband is likely to lose the means to support herself and her children.

Under Sharia'a law in the Maldives, girls who have achieved puberty, however young, are regarded as adults as far as sexual activity is concerned. Where rape or sexual abuse is not proved or accepted in court, the punishment is the same for such girls, as it would be for adult women. This makes it difficult to persuade families that it is in the interests of their daughter to report such incidents. There is a further disincentive in cases of intra-familial abuse as very often women are economically dependent on men. The procedures followed in cases of sexual violence by the judiciary are obscure. It is difficult to prove such violence in the court of law as several witnesses to the act are required. A female victim may be penalized for illicit sex even when she has been raped and abused. The penalty may be banishment for one year, house arrest and public lashing. A lighter sentence may be granted in consideration of the merits of a particular case. Reporting on rape by the husband is unheard of.

Legally speaking, women are free to choose their husbands and allowed to keep their names after marriage. In accordance with Sharia'a law women can acquire, manage and dispose of property. Family property by inheritance gives one third to females and two thirds to males. In situations of divorce women are at a disadvantage unless a pre-nuptial agreement to distribute property equally has been made prior to the wedding.

Protecting the Rights of Children The Government of the Maldives has consistently demonstrated deep commitment to children's rights. The United Nations Convention on the Rights of the Child was signed in 1990; Parliament ratified it in February 1991. The universalization of immunization and control of communicable diseases are reflected in marked improvements in child morbidity and mortality patterns. All children have access to school. Child labour, child prostitution, trafficking in children and street children, phenomena which are a disturbing but inevitable part of the social landscape in South Asian countries, are virtually unheard of in the Maldives. However, unemployment, urbanization, consumerism, population growth and the erosion of traditional culture are factors that strain families and family relationships and have reverberations in children's lives. Overcrowding in urban households (Box 1.8) with its attendant lack of space for study or indoor and outdoor recreational activity can pose serious constraints to children's development and their levels of educational achievement. Children also face the possibility of being deprived of care and affection of one or both parents. This is also true when fathers must travel to other locations for work. In other cases children may be sent away from home at a young age to live with relatives or friends while they attend school in Male' or on another island. There are growing concerns regarding children who assist with domestic chores in the homes of friends and family in exchange for accommodation whilst attending school in Male. The majority of children performing domestic tasks may be treated with respect and care but for some their vulnerability to abuse and exploitation may be increased.

As already mentioned, early marriage compromises the rights of both minor mothers and their offspring. Divorce and frequent remarriages are also detrimental to stability in a child's life and can set the stage for abuse. Behaviour problems are a common outcome. Figures from the Unit for the Rights of the Child (URC) indicate that almost 40 per cent of children with behaviour problems came from broken families. High divorce rates and high fertility often result in children growing up in large, "blended" or "polynuclear" families, with complex relationships where attitudes and values of different members of the family may differ. Complex family relationships increase children's vulnerability to abuse, particularly in step relationships where the potential for conflict may be high.

While the problem of child prostitution has not been recorded, in the absence of monitoring it could potentially become a problem because of its high correlation with children who have been sexually abused, and its potential to deny a child their rights. At present boys are not being identified as being possible targets for abusers. As awareness increases and the stigma is reduced such referrals are predicted to increase. This may result in a comparable decline in children reported for minor criminal offences and under other categories of abuse. Many of the lesser criminal offences are carried out by children who have been hurt and abused and are angry at society and its failure to protect them. The casework with respect to sexual abuse is considerable. It requires specialist knowledge and skills to meet the needs of the child and their family.

Box 1.7
Housing and Population Distribution

The uneven distribution of population within the archipelago gives rise to a range of housing and shelter problems, some of which have their origin in the highly dispersed nature of the population, others in concentration and severe overcrowding. The population in Male' grew slowly between 1911-1965 – from around 5,000 to 10,000. Between 1965-77, however, Male's population almost tripled to 29,522, largely due to migration from other atolls and islands to the capital island. Today, the population of Male', which is only 2 km² in size, exceeds 70,000 giving it a population density of 35,000 per km². Apart from Male', there are 6 other inhabited islands that have a population density of more than 200 persons per hectare. Three islands have a population density exceeding 364 persons per hectare (more than Male') – Kadholhudoo in Raa (nearly twice that of Male'), Hinnavaru in Lhaviyani and Thulhaadhoo in Baa.

The quality of housing is a measure of physical well being and welfare. Notable improvements have been recorded in the physical quality of housing in the past decade. The state remains the owner of all land some of which it allocates for various purposes to individuals free of charge. Recipients however retain no ownership rights (and rights of sale and transfer) in perpetuity. A small proportion of land, either gifted in the days of the Sultans or reclaimed from the sea, is legally owned by families.

Male' faces acute housing shortage. The average size of household in the Maldives is 7; the figure being 9 for Male' (Statistical Year Book, 1999). In Male' 40 per cent of the population occupies dwellings without a compound compared with an average of 7 per cent in the atolls. According to the VPA, the number of people with less than 40 square feet of living space is 10 per cent higher than the average for the atolls. Fourteen percent of the population live in conditions where there are five or more persons per room. In Male' "shift sleeping" is a frequent occurrence. Cases of up to 10 persons sharing a single room no larger than 3 x 3 m are not uncommon. This inevitably gives rise to squalid and unacceptable housing conditions. In Male', problems of overcrowding are exacerbated by the traditional street pattern that is unsuited for motorized traffic, with congestion caused by parked vehicles in narrow streets contributing to the deterioration in the quality of life. Pollution is on the increase. Dust and fumes generated from work sites, cement warehouses and congested roads have become health hazards. Opportunities to address such problems are seriously curtailed by the sub-division of private land holdings through inheritance, with the vast majority of plots now too small to provide the land required for high rise housing. With no apparent land classification regulations and zoning, parts of residential properties are continuously converted into shops, restaurants, tea houses, hardware stores and so on; the close proximity of these facilities to crowded residences poses a serious hazard in case of fire. The shortage of housing is compounded by shortage of land for building, high costs of construction, lack of private enterprise interest due to problems of ownership, in-migration, and the gap between income levels and rental costs pushing people into small dwelling units. In Male' the rent for a medium sized unit can be as high as US\$ 500-1000. Government subsidized housing costs between US\$ 200-300 per month for a two to three bedroom unit

Severe overcrowding is not confined to Male'. There are three other islands with even higher population densities. In Kadholhudoo in Raa Atoll the density is 60,000 per km² while lacking much of Male's infrastructure and services. The extreme level of overcrowding places great stress on vulnerable ecosystems. It also gives rise to risks of infection, while the general lack of privacy is believed to be an increasingly important source of stress and a range of emotional problems. They are manifest in such social problems as juvenile delinquency, drug abuse, crime, child abuse and even suicide. The lack of space and privacy can have negative effects on the academic performance of students. The lack of space on densely populated islands, especially for recreation, indoor and outdoor, has also been identified as a factor that is hampering the physical and psychological development of children.

The number of referrals concerning child abuse to both the URC and the Child Protection Unit at Police Headquarters has been increasing, reflecting growing awareness. The personnel in both Units have been exposed to professional training, which is set to continue in order to reach a high standard of practice. This has involved widespread awareness training and the creation of a network of island counselors. It has also involved forensic training, the establishment of procedures for all professionals dealing with children, further clarification of the law relating to children, the development of procedures to protect children in state care and opening up the therapeutic field to offer a range of therapies for children who have been undergone psychological trauma.

Juvenile delinquency is a growing problem in the Maldives. Its rising incidence and increasing seriousness, particularly in Male, is a major concern in Maldivian society. Statistics from the Ministry of Defense indicate that there has been an increase in petty crime from 169 in 1992 to 462 in 1996. The number of youngsters under 19 years of age sentenced increased from 391 in 1988 to 512 in 1998. Legislation and circulars regulate the administration of juvenile justice in the Maldives. A minimum age for criminal liability is established at 14 years (Adultery does not apply to children between the ages of 7 and 14). Persons under 16 may not be prosecuted and may be referred to the URC for counseling. Over a third of cases referred to URC since its inception in 1992 have been directly from the National Security Service (NSS) for criminal activities. Of those children in conflict with the law referred to the URC the majority are referred for stealing or assault. Most of these referrals are from Male' and involve boys. Of note is that at least one third of adolescents referred are not attending school. In line with a recommendation made by the International Committee on the Rights of Children, a Special Children's Court has been established. Representatives from URC sit in at proceedings in this court.

Children who are disabled are also recognized as needing special protection. A positive trend in the Maldives is that children with disabilities are looked after in the home usually with love and care. The State does assist in some cases with medical costs. There is however no facility for institutionalization, financial support, therapy or counseling. Data on children with disabilities is limited. There have been some studies on disabilities carried out in the atolls in the last 20 years. A survey in 1981 recorded 1390 persons with some form of disability. A national survey carried out in 12 atolls in 1997, while it generated some useful data, was regarded as somewhat inadequate on account of inaccurate diagnoses and varying descriptions of disabilities. Nonetheless it was possible to extrapolate some trends with regard to disability among children. Another study in four atolls showed that children with disabilities rarely attend school and are not provided with any alternative. Currently, there exist limited educational facilities in Male' for children with hearing and visual impairments. Perhaps the least understood needs are those of children with cerebral palsy. The large number of babies born with low birth weight is a matter of concern as they are more vulnerable to environmental factors that may result in their developing disabilities. The URC and some NGOs, notably CARE Society, have been working on drawing attention to the special requirements of children with disabilities.

Drug Abuse Official recognition of a drug abuse problem in the Maldives came in 1977, and the first legislation was passed in the same year. Statistics indicate that the drug situation is worsening rapidly. A total of 460 cases of substance misuse were reported in 1998 as compared to 22 in 1989 (Table 1.16).

Table 1.16 Drug abuse cases reported by age, 1977, 1989, 1993 & 1998

Age	1977	1989	1993	1998
<16	0	0	11	51
16-24	1	8	88	235
25-39	2	13	53	135
40+	0	1	3	39
Total	3	22	122	460

Source: Government of Maldives, Health Report, 1999

The first drug arrest was for possession of marijuana, which had been introduced to the Maldives via a tourist. Then hash and hash oil was introduced. In 1993, brown sugar, a highly adulterated form of heroin suitable for inhaling when heated, but not for injecting, began to enter the country. According to police reports the most common substances abused are cannabis and heroin. It is also recognized that medicinal drugs, such as diazepam and cough syrups are frequently abused. There are no records of reported or noticed instances of organized smuggling operations in the country. It is believed that most of the drugs come into the country via both local and foreign individual travelers who arrive from the neighbouring ports like Trivandrum, Tuticorin, and Colombo. These travelers are not particularly linked to any other illegal activities. It is suspected that a considerably large amount of drugs are smuggled into the country via sea vessels that dock at ports. In some of the capital islands, heroin use appears to be established among young people, but most access is in Male'. When the supply is low on the islands, agents go to Male' for more. A drug sub-culture has emerged marked by language, clothing styles and probably music preferences. Much of this behavior is said to be modeled after that seen in films and TV. Clearly, many young people are trying heroin and many are getting addicted, at increasingly younger ages. Drug rehabilitation officers say that the average age of first heroin use is now around 12-14.

The Law on Drugs was amended in 1995, making a strong distinction between suppliers and users. Under the amended law drug suppliers are given harsh punishment and simple users are given opportunities for rehabilitation. Current drug control approaches include the establishment of a Narcotics Control Board (NCB), in 1997, to coordinate the drug abuse prevention and rehabilitation programmes, life imprisonment for drug dealers (25 years) and 3 years imprisonment or institutional rehabilitation for first offenders. First offenders may be given suspended sentences and sent to rehabilitation, subsequently released on parole for a prescribed period and then the sentence may be annulled. Legal immunity is provided only for those who opt for voluntary rehabilitation. Psychologists and trained counselors work in the Drug Rehabilitation Centre on Himmafushi Island, the only facility of its kind in the Maldives. In June 2000 there were some 144 persons in the programme, 15 of whom were female. The youngest client was 13 years old. The total number of clients who have undergone rehabilitation since 1998 is 270. Persons come to the facility either voluntarily or are referred to it by the court. If a convicted dependent who is on parole is caught by the police for a second time, rehabilitation is not an option; s/he is sentenced for 12 years in jail. Once the residential rehabilitation phase has been completed, individuals are returned to their families for community rehabilitation for a period prescribed in the parole condition and must undergo random urine tests, attend life

skills classes and individual/group therapy and counseling sessions held at NCB. There are some 97 clients in community rehabilitation at the time of writing.

Box 1.8 **The Potential Risk of HIV/AIDS**

As of June 2000 only some 74 documented cases were known in the Maldives – the majority of them expatriates or Maldivians with a history of travel abroad. But lessons from around the world show that HIV is spreading more widely and rapidly than was previously expected. There are several existing and emerging risk factors within the Maldives, which could allow the virus to gain entry in a more significant way. This would have reverberations on all aspects of the well being of Maldivians – ranging from excessive stress on the health system to negatively affecting the tourism sector, the mainstay of the economy.

HIV/AIDS is a complex disease, which is transmitted because of a complex set of reasons. It needs a multi-sectoral response that addresses its social, cultural, epidemiological as well as medical aspects. The Maldives' greatest challenge is to maintain its advantage of being shielded from the HIV/AIDS in a sustainable way. The Maldives has shown marked improvement in several of the usual risk factors associated with HIV/AIDS including educational coverage, GDP, provision of health care facilities, and acceptance of family planning. However, there are concerns with respect to other factors such as income disparities, growing drug use, inequitable gender relations, unemployment and disparity, large numbers of thalassaemia patients in need of frequent blood transfusions and importantly the population's high rates of mobility for work and leisure both within the country and abroad. Unemployment, income disparities and exposure to consumerism can create a sense of relative deprivation. This in turn can produce gradual changes in the social fabric that reduce the impact of normative mechanisms of social control, such as religious principles.

There are about 27,000 foreign workers in the country; nine out of ten are male. In most nations large concentrations of migrant male workers lead to the growth of prostitution. High numbers of workers are employed in tourist resorts and, especially if they are foreigners, are separated from their families for long periods of time; such a situation of isolation and the stress of living in crowded all-male groups creates considerable vulnerability to the sexual transmission of HIV/AIDS. Many people from the atolls come to Male' for education or employment. Numerous students go abroad for higher education. Other Maldivians travel to several foreign countries, including India, for business or to seek health care. This constant movement supplies the conditions for the virus to find its way into a country. Power differentials between men and women and high levels of divorce and remarriage can also contribute to the risk of HIV/AIDS. As HIV has a long silent period, one infected man (or woman) could infect several spouses before showing signs of AIDS. All sexual behaviours that spread HIV are found in the Maldives. Fear of discovery and legal prosecution limits these practices but does not forestall them entirely.

As compared to other age groups youth are particularly vulnerable to HIV. In the Maldives 47 per cent of the population is under age 15. Those who are young and reach the age at which sexual activity is more likely, 15-25 years, comprise another 20 per cent of the population. Drug abuse is steadily rising in the Maldives, with a forty-fold increase between 1977 and 1995. Drug abuse and associated sexual behaviour among youth is probably the single most obvious potential risk factor for HIV. Injecting is not a threat at present but could be a huge potential threat and needs to be monitored carefully.

Personnel working in AIDS prevention have little or no access to up-to-date information on the epidemic, its epidemiology. They have inadequate knowledge and skills in discussing aspects of human sexuality and behaviour change, and the STDs. Condoms are available through family planning registration and over the counter. But condom use is low. Responsible sources of information in the way of print materials are few and far between. There is a fundamental need to "break the silence" surrounding HIV/AIDS through scientifically designed communication targeted at various groups. Empowered with knowledge the population of the country would have the opportunity to sustain its advantage of being protected from the deadly virus.

Source: A situational assessment of HIV/AIDS in the Maldives for the year 2000, C. Jenkins, DPH and UN Theme Group, Male', 2000.

Unequal Human Development

The relatively high value of the HDI for the Maldives, which is computed on the basis of statistical *averages* in life expectancy, literacy and income levels, conceals widespread poverty in the Maldives. However, for a truly valid assessment of the progress of human development *equality* (in the distribution of the benefits of progress) and *deprivation* (in terms of the denial of resources and opportunities that some groups face) must be taken into account. Despite the Maldives' impressive record and significant achievements in human development, wide disparities and striking inequalities characterize its progress. There are persistent disparities in human development between Male' and the atolls, between atolls, and among islands within the same atoll.

Male' is the established economic centre of the Maldives with some 28 per cent of the total population. More importantly, it is the location of the only international airport to receive tourists (429,666 in 1999) exceeding the country's population, the only wharf capable of handling containerized cargoes, which amount to an estimated 210,000 tonnes of non-oil imports each year, and the commercial hub for redistribution of nearly all imported commodities to the 200 islands. The Government has invested heavily in public infrastructure and services in Male' to accommodate and facilitate this economic activity that has attracted outer islanders for employment. The better social services - health and education and other infrastructure have resulted in even greater inward migration that has placed unsustainable demands on the resources of Male'. Today the capital, in addition to better health and education services has a reticulated water and sanitation scheme, a solid waste disposal system and is considered by many as a more comfortable place in which to live. However, the land resources are fully utilized, overcrowding is a serious concern and it is questionable whether the island can continue to provide the environment for further private investment to maintain economic growth. Development initiatives have been extended to the nearby islands of Vilingili and Hulumale' in an attempt to provide reasonable accommodation alternatives, together with areas for commercial activities. Given the nature and location of these nearby islands, the cost of extending the land base and developing transport linkages is extremely high. The public sector investment program is heavily weighted towards activities around Male'.

A few islands and atolls have recorded exceptional progress in the past two decades, benefiting from better access to land, good fish collection services, and proximity to the main tourist zones. Other atolls and islands have, however, experienced only modest improvements. These islands may be disadvantaged by a shortage of land and fresh water, and the difficulty of obtaining live-bait required for pole-and-line fishery. Some islands are still barely accessible, protected by reefs that cannot be penetrated by motorized vessels.

On the whole, people in Male' enjoy a higher standard of living and differ from the atolls in terms of ownership of many common household goods. For instance according to the Vulnerability and Poverty Assessment (1998)

- In the atolls, 57 per cent of the population does not have access to fans. In Male', only 37 per cent of the population does not have access to fans.

- In the atolls, only 30 per cent of the population has access to a sewing machine. In Male', more than two-thirds of the population in Male' enjoys such access.
- Some 87 per cent of the atoll population does not have access to a refrigerator. The corresponding figure for Male' is 49 per cent.
- In the atolls, 83 per cent of the population does not have access to a washing machine as against 58 per cent in Male'.

Male's education facilities are recognized as a major cause of internal migration. Until recently the only secondary education provision was limited to Male'. In 1989, 42 per cent of the enrolment in schools in Male' were atoll children. In 55 per cent of these cases, the parents had also come to Male', many being employed by the Government. The remaining 45 per cent stayed with relatives or friends. Male' has no residential school facilities. The superior quantity and quality of education in Male' compared with the atolls is a major economic, social and equity issue. Inequality lies more in quality. Resourcing per student is MRf. 2486 for Male' primary schools compared with MRf. 1369 per student in the atolls. Teaching in English, which provides opportunity for further study and employment, is universal in Male' schools but varies in atoll schools according to resources available.

In Male', formal schooling is preceded by two years of formal pre-primary education, the lower and upper kindergarten classes. Less formal traditional pre-schools are the norm on the atolls. While pre-primary education is in the process of evolving from an elite alternative, primarily restricted to Male', to a more commonly available opportunity in the islands, substantial differences continue to exist in the quality of programmes in the capital and the atolls. In 1996, atoll enrolment in lower secondary education was only 5.1 per cent of the number enrolled in primary school, as against 65 per cent in Male'. School repetition rates vary dramatically within atolls. It is 50 per cent in Alifu, 25 per cent in five atolls and less than 10 per cent in ten atolls. An estimated 12 per cent of the atoll population lives on islands with schools that are still without drinking water. And 13 per cent live on islands in which there are no toilet facilities. More than one-half of the population is to be found on atolls without nursery schools, with the figure rising to 100 percent in the case of Lhaviyani and Gnaviyani.

Atoll students face stiffer competition for a limited number of seats in Grades 8, 9 and 10 particularly because of the switch to English as the medium of instruction. The quality of secondary education is poorer in the atolls than in Male', and this results in students being unable to cope with the demands made of them in secondary schools. Moreover, most of the students keen on pursuing secondary education have to move out of their islands – and often shift to Male'.

There are also striking differences between Male' and the atolls in the provisioning of health services. There are around 10 qualified health personnel per 10,000 population in the outer islands as against more than 58 in Male' (Table 1.17). Health centres also tend to be located in the more densely populated or capital islands

Table 1.17 Increase in Health Personnel in Male' and the Atolls

Category	1990		1995		1998	
	Male'	Atolls	Male'	Atolls	Male'	Atolls
Doctors (MBBS)	17	6	54	35	49	62
Doctors (Specialists)	18	0	52	12	76	16
Staff Nurse	21	5	122	14	186	23
Nurse	62	55	99	70	133	130
CHW / FHW / Foolhuma	0	921	0	769	2	787
Pharmacists/ Asst. Pharmacists Lab Technicians	92	2	112	59	141	93
Public Health Management / Other Paramedicals	34	4	85	18	47	8
TOTAL	256	992	612	935	632	1119

Source: Government of Maldives, Health Report –1999

leaving the smaller and more remote islands to face often long and difficult sea transport to seek medical treatment by a doctor. Around 30 per cent of the atoll population has difficulty in obtaining medicines, with the figure rising to 50 per cent in the case of a few atolls.

Male' fares better than the other atolls on most indicators of human development. Table 1.18 shows the values of the indicators that make up the HDI.

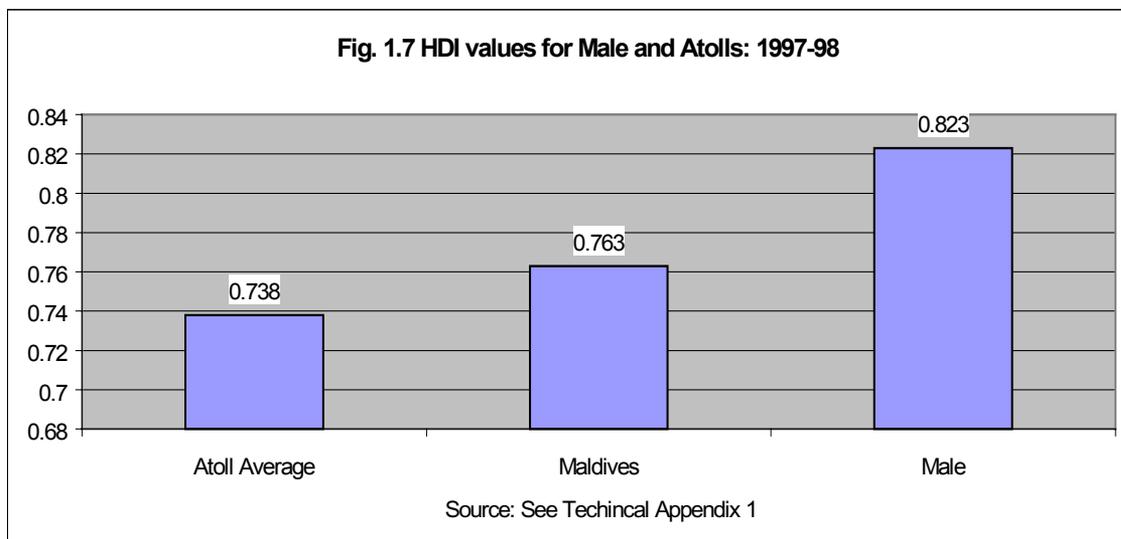
Table 1.18 HDI values for Male' and the atolls

	Life Expectancy at birth (years)	Adult Literacy Rate (%)	Gross Enrolment Ratio (%)	Average per capita household income (Rufiyaa)	Human Development Index (HDI)
	1997-98	1997-98	1997-98	1997-98	
Male'	77	99	79	12,775	0.0.823
Atoll	68	97	80	7,300	0.738
Average Maldives	70	98	80	8,760	0.763

See Technical Note for computation details.

Whereas there is virtually no difference in adult literacy and school enrolment between Male' and the atolls, there are striking differences in life expectancy and incomes. Life expectancy in Male' is, on average, 8 years higher than in the atolls. And income in Male' is almost 75 per cent higher than in the atolls. As a result, the HDI value for Male' is 8 per cent higher than the national average, whereas the HDI value for the Atolls is 3 per cent lower than the national average.

The HDI value of 0.823 places Male' in the "high" human development category. On the other hand, the average for the Atolls – 0.738 – puts them in the category of "medium" human development (Figure 1.7).



In addition to inequality, the relatively high levels of per capita income and the HDI fail to capture the extreme vulnerability of the islands and the insecurity of the country's highly dispersed population.

VULNERABILITY AND HUMAN DEVELOPMENT

At the same time as development within the country is uneven, as a country the Maldives remains highly vulnerable. It is extremely susceptible to environmental factors - including natural disasters and ecological crises. This vulnerability stems from an interplay of factors including remoteness, geographical dispersion, vulnerability to natural disasters and limited natural resources. Human systems and the environment are dependent on one another. Risks to the environment will eventually translate into risks to humans because of their dependence on the natural environment for resources. In turn the environment is susceptible to both natural events and appropriate management by humans. This vulnerability places unique limitations on human development and could result in abrupt changes in the livelihoods of its people. For this reason it is necessary to identify the sources of this vulnerability and factor it into the human development picture that obtains in the Maldives.

Small Size

Even by the exceptional standards of archipelagic developing countries, the physical geography of the Maldives is unique. The total area of the Maldives is about 90,000 km², but only 2 percent of that area is land. Almost all the 1190 islands are very small and low-lying coral islands. There are a few special-use islands e.g. for fuel storage and for garbage. Since 1972, 84 islands have been developed as exclusive tourist resorts. Close to 980 islands continue to be uninhabited. Almost all inhabited islands in the Maldives are small – both in terms of population size and land area.

Only 33 inhabited islands have a land area of more than 1 km². While just 3 islands – Gan in Laamu Atoll, Hithadhoo in Addu Atoll and Foammulah have an area larger than 3 km². Most of the islands tend to be too small for productive use. Most of the islands are low lying; 80 per cent have an elevation of less than one metre above sea level. But for the protection of the outer reef, many of the islands would be washed away by ocean waves. Movement, both internally and externally, is dependent on air and sea transport, which can be severely disrupted during the monsoon period. Many islands in the Maldives are confronted with problems of accessibility. More than one-half of the atoll population is to be found on islands that experience such problems, with the figure rising to around 90 per cent in the cases of Haa Dhaal and Noonu. Harbour problems, exacerbated by adverse weather conditions, are the main reason reported for poor access in most atolls.

Physical Vulnerability

The islands are vulnerable due to their small size and dispersal, and to the natural phenomena of ocean waves and winds and human settlement. Some of the main environmental concerns are the impact of periodic storm events and implications of global climate change. Non-availability of baseline meteorological and land survey data present problems in assessing the extent of the hazard risk from storm events. The vulnerability of the atoll islands to storm events is a key issue to be addressed when assessing sustainable development practices in the Maldives. The small size and low elevation of the islands mean that the impact

of coastal flooding and erosion can be particularly severe. Beach erosion is a common problem throughout the Maldives. Some 70 per cent of the population inhabits islands that experience beach erosion, with the figure rising to 94 per cent in the case of the atoll population. In 8 of the nation's 20 atolls, all islands are reported to suffer beach erosion. People need to take into account natural hazards and proceed in a manner that minimizes rather than exacerbates the impact and level of hazardous risks. As a low lying island nation, the Maldives stands to be particularly adversely affected by green house emissions that cause climate change.

Prospects of Submergence There is tangible evidence of the nation's vulnerability to climate change and sea level rise. The International Panel on Climate Change is, on the basis of available evidence, today predicting that sea levels can be expected to rise by some 50 cm. by the end of the next century. The Maldives, with 80 per cent of its land area rising less than 1m above sea level, must view such a prospect with the greatest alarm. The main airport, which is the only ingress for international tourists, lies a mere 1.5 meters above the mean sea level (MSL).

The reefs are important not only for protection but also for the fishing industry and local subsistence. Consequently, all of the Maldives is extremely vulnerable to future sea level rise if the coral growth (which replenishes the sand supply) cannot keep pace with the rate of sea level rise and if coral and sand mining are not managed properly. Even more important would be any changes in weather patterns, where winds and storm surges would place the entire population at risk.

Other Adverse Effects of Climatic Change Observed changes in monsoon patterns are already giving rise to significantly increased coastal erosion activity in different parts of the archipelago. Up to 90 per cent of all inhabited islands at present suffer from varying degrees of coastal erosion. Some are seriously affected, with the loss not only of shoreline but also houses, schools and other infrastructure. The reason for the changes in monsoon patterns and associated erosion processes are as yet unclear, but they may be linked to climate change.

The El Nino phenomenon may also be linked to another on-going process of change. Available evidence suggests that coral reefs in most parts of the Maldives are under severe stress and that bleaching of the reefs is becoming widespread. The stress appears to be caused by a significant increase in sea temperature. In April 1998, satellite data revealed that a warm water mass in the vicinity of Chagos was moving northwards. By mid to late April, surface water temperatures in open water were found to exceed 31°C both inside and outside the atolls, while water temperatures in shallow reef flats reached 34°C (and possibly even higher). The fact that bleaching has been fast, affects many species of coral at many locations and at different depths is alarming, and if these conditions persist, coral mortality will be both inevitable and widespread.

The drama that is now unfolding seems destined to be followed by many others. The prospect that the El Nino phenomenon may be linked to global warming, with the possibility of an increase in both the frequency

and intensity of El Nino disturbances and of major storms, is a matter of serious concern for the Maldives. These are more than prospects that threaten the vulnerability of the country. They threaten its very survival.

Retreat and protection are the two most commonly considered response options for the Maldives. Current storms have already caused the Maldives to build protective structures (breakwaters and seawalls) at great expense (e.g. shore protection costs \$800/meter). Protecting 10 km of shoreline for Male' alone would cost nearly \$8 million, with a total cost of protection for the Maldives estimated at nearly \$1 billion. The Maldives has already started to evacuate residents on four of the low-lying islands to larger islands because the financial resources are not available to protect all the islands. These issues spurred the nation to formally initiate coastal zone management through legislation, planning and monitoring.

Proneness to Natural Disaster Being composed of many small low-lying coral islands, the Maldives is vulnerable to natural disasters. Although less prone to hurricanes and cyclone damage than some small island states in the Caribbean and South Pacific, the Maldives occasionally experiences severe weather conditions that can have particularly damaging and long-lasting effects.

In the past decade, the Maldives has been affected on three occasions by extreme weather conditions that acquired the character of natural disasters. In April 1987, most of the archipelago experienced three days of severe tidal swells that caused extensive damage. Male' and its surrounding islands were particularly severely affected. On Male', the swells either washed away or inundated a large part of the 600,000 sq. of land reclaimed by the Government from shallow waters along the southern and western coast between 1979-86 at a cost of Rf.50 million. A large part of the retaining wall on the southern seafront was destroyed and washed ashore, and a refuse disposal compound was badly affected, spreading refuse to surrounding areas that was to cause a serious outbreak of diarrhea diseases. Damage to Hulule Island and the international airport was no less severe. The surges destroyed the retaining walls on several sides of the island, flooding the runway, and weakening its foundations. Approach lights and the fuel jetty were damaged, the harbour breakwater collapsed, and the AFTN antenna was completely uprooted. The swells caused damage to property and infrastructure was very conservatively estimated at US\$5 million.

While rehabilitation work was still in progress, the country was again subjected to new surges in June and September. Although the damage caused was less extensive than in April, cultivated fields in some southern atolls were inundated by seawater and some causeways linking islands were badly damaged. Some uninhabited islands were torn in two by the force of the surges.

The events of 1987 led the United Nations to adopt an emergency resolution calling upon member states to provide disaster relief and to assist the country in strengthening its coastal defences. The defence works required to prevent a recurrence of these events cost well in excess of US\$20 million, and were subsequently extended to provide for an improved system of coastal defence around most of the capital island that cost some US\$ 51 million.

The third event occurred in May 1991, when severe storms swept over the whole of the country, being particularly destructive in the southern atolls. The storms uprooted or damaged more than 190,000 trees as well as destroyed 3,300 buildings. In Addu Atoll alone, the storm uprooted 60,000 banana trees – more than half the atoll's total – as well as several thousands of fruit trees, including virtually all of the atoll's mature mango and breadfruit trees. Some 2,000 buildings were severely damaged or destroyed, including several garment factories producing for exports.

Ecological Fragility Island ecosystems are among the most vulnerable on the planet. They are also particularly prone to human-induced disruptions. On land, the systems are characterized by a high degree of endemism, with a smaller number of species and sub-species of both animal and plant life. They characteristically occupy narrow ecological zones, have limited capacities for adaptation, and are very prone to extinction. This endemism – a fundamental feature of island ecology – tends to be greater in coral atoll systems and when islands are small and remote from large landmasses, as is the case with the Maldives. This gives the nation a genetic resource base that is not only very narrow but also very prone to human-induced disruptions that can easily result in irreversible damage. The peculiarities of island ecology find tangible expression in a variety of ways. Low coconut productivity in the Maldives, for instance, has been linked to the absence of pollination agents, while agricultural pests such as the rhinoceros beetle, tend to be more aggressive than elsewhere because of the absence of natural enemies.

While land-based genetic resources are very limited, marine bio-diversity in coral atolls is very high, and the Maldives is no exception. Some 1,200 species of fish have been identified in Maldivian waters, making them one of the most species-rich environments in the world. This bio-diversity is associated with the coral reefs, which have a biological productivity comparable with tropical rain forests. The Maldives possesses several thousand kilometres of coral reefs, with more than 209 identified species of coral and 285 known species of algae.

Coral reefs thrive in a relatively narrow range of conditions and are dependent for their survival upon the symbiosis that exists in the reef community. The complexity of coral reef systems makes them highly vulnerable to changes induced by human activity as well as changes in natural conditions. The former can take many forms and include offshore coral and sand mining, onshore sand mining, sedimentation caused by rainwater runoff, the disposal of untreated sewage and solid wastes, oil spillage and other forms of marine pollution, discharges by power and desalination plants that affect water temperature and salinity, anchor damage, and poorly conceived and constructed harbours, jetties and other coastal works that can affect current and sedimentation patterns. More formidable still are changes that can occur in boundary conditions occasioned by natural processes, such as increases in water temperature (most corals cannot survive for long periods in water temperatures above 29°C), direct sunlight (that affects photosynthesis) and rainfall (that can affect water salinity in the lagoons). These changes cause stress in the reef systems that affect conditions for coral growth and change the relationships existing within the reef community. Growth is at first retarded and opportunities for colonizers, such as crown of thorns starfish, boring sponges, mollusks, sea urchins and some algae, to invade the reefs. If the stressful conditions persist, changes in reef community structures may lead to physical degradation of reef frameworks by physical and biological

erosion and mortality followed by the collapse of coral skeletons and the exposure of the coastal areas to increased wave action. In low coral atolls like the Maldives, such processes not only reduce the sustainability of livelihoods but also add to the vulnerabilities of island populations.

Scarcity of Land Based Resources

The Maldives is characterized by a severe paucity of land-based natural resources. This applies not only to hard minerals – the Maldives has none – but also to such basic resources as water and soil. The Maldives has no rivers, lakes or even streams. Although a few islands have naturally occurring fresh water lagoons, these have not been used for water supply. Large-scale extraction of water from these lagoons would probably create problems of seawater incursion and subsequent increased salinity. The islands have traditionally been dependent for their water supplies on the shallow layer of fresh water formed by rainfall that floats on seawater. This lens is, in some islands, too thin to support even shallow wells, while in all islands the freshwater lens is susceptible to rapid depletion and contamination.

Soils in the Maldives are of extremely poor quality. They tend to be porous and highly alkaline, being notably deficient in potassium and nitrogen. Available phosphorous often interacts with calcium to form calcium phosphate, while calcium carbonate, which is often present, impedes root penetration. Land suitable for agriculture in the whole country has been estimated at less than 30 square kilometers. The shortage of land severely hampers agricultural development in the Maldives. Many islands have very little land that can be considered suitable for agriculture. The total land area suitable for cultivation is one of the lowest in the developing world. The average per capita land availability of 110 sq.m compares with an average of more than 3,000 sq.m. per capita for all low-income countries with a population of one million or less.

Land suitable for agriculture is also very unevenly distributed throughout the archipelago. One atoll – Laamu – accounts for 16 per cent of all agricultural land, and 3 atolls for more than 30 per cent of the total. Five atolls have virtually no agricultural land, and in another 6 atolls, available agricultural land is less than 100 hectares (Table 2.1). This makes the Maldives almost totally dependent on imports for its food and other essential items. The islands do produce some tropical fruits such as coconut, banana, papaya and breadfruits. But for all practical purposes, the principal natural resource is fish.

Table 2.1 Shortage of agricultural land

Cultivable land (ha)					
S.No.		Inhabited Islands	Uninhabited islands	Total area	Cultivable area per capita (m ²)
1	Haa Dhaal	255	90	345	250
2	Haa Alifu	235	130	385	200
3	Shaviyani	123	121	244	230
4	Noonu	96	20	116	110
5	Raa	113	121	234	190
6	Baa	10	67	77	90
7	Lhaviyani	7	43	50	60
8	Kaafu	19	0	19	20
9	Alifu	51	22	73	60
10	Vaavu	0	0	0	0
11	Meemu	12	0	12	20
12	Faafu	21	0	21	70
13	Dhaal	0	0	0	0
14	Thaa	54	4	58	60
15	Laamu	350	85	435	430
16	Gaaf Alif	160	101	261	320
17	Gaaf Dhaal	107	184	291	240
18	Gnaviyani	81	0	81	120
19	Seenu	99	0	99	60
	Total	1793	988	2781	110

Source: Sixth Round Table, 1999

The inadequacy of land-based resources also implies that the Maldives is without durable building materials. There are neither rocks nor clays, and the country, unlike many other developing countries, has been unable to experiment with new types of building materials derived from agricultural wastes and residues. The traditional source of almost all durable building materials has been coral rock blasted from the reefs that enclose the islands. However, in the interests of environmental conservation, regulations have been imposed on coral mining. The substitution of coral rock, especially with imported cement blocks, has added to the construction costs of new buildings.

Geo-physical Constraints

Access to physical infrastructure greatly influences the quality of life. Islands well served with infrastructure tend to have higher standards of living, whereas islands with no or limited access remain far more vulnerable. While Male' suffers from overcrowding and an acute scarcity of housing, in general access to basic services is superior in the capital city as compared to the atolls.

Drinking Water – Whereas almost the entire population has access to safe water in Male' and the atolls of Meemu, Faafu, Vaavu, Alif Dhenkunu buri, and Gaaf Dhaal, almost 38 per cent of the population in Haa Alif and 42 per cent in Seenu do not enjoy access to safe water. In Male' both rainwater and desalinated water are used for drinking and cooking. Well water is often used for other domestic purposes. With the

privatisation of water and sewerage services in Male' water connections were provided to households on request. Water now is metered and all consumers pay in accordance with their level of consumption.

The population of the Maldives has traditionally been dependent for drinking water on shallow wells that provide access to the island's freshwater lens. On the islands well water is the main source for domestic needs and rainwater is widely used for drinking. Accumulated through rainwater, the lens is often shallow

and vulnerable to pollution, especially through percolation of human wastes (Box 2.1). Unsustainable use of the lens may easily result in salinity intrusion, water exhaustion or contamination, which may eventually render an island unfit for human habitation. Also there is a lack of skilled personnel to undertake engineering design and construction supervision and to undertake operation and maintenance duties. In recognition of this problem and the declining quality of well water in many islands, high priority has been accorded to the construction of rainwater tanks, both collective and

individual, as well as rainwater collection schemes. The aim is to ensure that the atoll population, in line with the objectives stated in the Health Master Plan (1996-2005), has access to at least 10 liters of fresh water per person per day for drinking and cooking. By 1997, the Government under a joint scheme with UNICEF had provided about 40 per cent of households with a private tank. However, possession of a rainwater tank is not an indication of access to a sufficient quantity of safe water. Rainwater tanks are often too small even to provide even a meager supply of drinking water during the dry season. During these times, practically no water is available for other domestic uses and so people are forced to use untreated well water for washing and other purposes. The shortage of water is particularly pronounced in some southern atolls (Alif Dhekunuburi, Vaavu, Gnaviyani and Meemu), where one half of the population experience shortages of drinking water.

Unsafe water is defined as untreated well water. According to this definition, 9 per cent of the population is estimated as having no access to safe water with the figure increasing to 12 per cent in the case of the atoll population. This is responsible for the high prevalence of fecal related illnesses in the Maldives. Children are particularly vulnerable to the effects of these diseases. Although mortality due to diarrhoea and intestinal parasites is under check, lack of clean water and adequate sanitation continue to affect the health of many children. Malnutrition is exacerbated by the high incidence of worm infestation linked to poor access to safe sanitation and inadequate availability of safe potable water on many islands.

Box 2.1

The Gyben Herzberg Lens

Because the soil on Maldivian islands is poor, lacking in organic conglomerates and is hypercalcic, it is also highly porous. Infiltration of rainwater is almost immediate, with the rainwater forming a lens that floats on the salt water table and which rises and falls with the tide. This lens – the so-called Gyben Herzberg lens – is the only source of water on small coral islands. It is particularly susceptible to rapid depletion and to pollution caused by human wastes and agricultural inputs like chemical fertilizers and pesticides that leach easily through the porous soils. The exhaustion or contamination of the lens can cause irreversible and irreparable damage, rendering an island unfit for human habitation.

These characteristics impose many limitations on human activity and on the technologies that can be used on coral islands. In the Maldives, for example, small-bore sewage systems introduced on some inhabited islands to protect the fresh water lens have been unsuccessful due to the inability to create the slopes required for gravity based systems. In some cases, seawater penetrated the pipes, and entered the freshwater aquifer, adding to the salinity of the lens that the sewerage system was meant to protect.

Sanitation – The unique geography and geology of the Maldives create difficulties both for water supply and sewage disposal. Geographical constraints include, the flat, low lying topography of the islands, the remote isolated nature of the islands and the absence of naturally occurring surface water. The presence of the lagoons around the islands is an unsuitable site for sewage disposal. To dispose discharge outside the lagoon requires long outfall pipes. This is a problem particularly with gravity sewerage systems.

In 1987 following a severe cholera epidemic a sewerage system was constructed in Male'. Its installation led to a rapid improvement in many aspects of public health. The coverage of safe excreta disposal in Male' is now universal. There is however no sewage treatment and raw sewage is pumped into the sea. Although the situation in the atolls shows marked improvements, most households are still dependent on more traditional methods of waste disposal. Overall more than half of the atoll population makes use of toilet facilities and one in four of the population makes use of an open area surrounded by walls (*gifili*). The situation appears to be the best in the central and north central zones where more than 80 per cent of the population has toilet facilities. However there are atolls where upto 20 per cent of the population are still without any kind of toilet facility. In Faafu, more than 50 per cent of the population makes use of the beach, while there are islands (Dharaboodhoo and Nilandhoo) where two thirds of th population is without toilet facilities. In some northern atolls (Haa Alif, Shaviyani and Raa) and in some atolls in the south central zone (Faafu, Thaa and Laamu) approximately one-third of the population is still without toilet facilities. There are also islands such as Hanimaadhoo in Haa Dhaal, Fainu in Raa and Naalaafushi in Meemu where households are completely without toilet facilities.

Although the sanitation situation is improving, the growth of toilet facilities for the atoll population may only have marginal improvements for environmental health. Many of the toilet facilities, including the traditional *gifili*, discharge sewage and human wastes into groundwater which is used for human and domestic consumption. Untreated sewage discharged into the sea it could have an adverse effect on marine fauna and flora. The high level of nitrates in sewage is also a threat to the delicate ecology of the coral reef.

Solid Waste Disposal – Only Male', which produces around 56 tonnes of refuse per day, has a system of solid waste disposal, with the wastes periodically collected and dumped at a designated landfill site at a neighbouring island (Thilafushi). With the exception of hospital wastes, all other solid wastes, including toxic and hazardous substances, are disposed of in the landfill site, with the risk of leaches and pollution spills. Liquid toxic wastes are disposed off in the sewerage system for disposal in untreated form at sea. In all other islands, solid waste disposal takes traditional forms. These include disposal in unlined pits with the risk of contamination of the fresh water aquifer. One in five of the atoll population inhabits islands where there is no demarcated area in which to dump or dispose of garbage. In the absence of such an area, garbage is usually dumped on the beach or buried in the compound. This practice is particularly pronounced in Lhaviyani, Laamu and Gaaf Dhaal, where 50 per cent of the population resort to this practice. Incinerators, used widely on the tourist resort islands, have not yet been introduced into inhabited islands.

Electricity In 1990, it was estimated that one third of the nation's population had no access to electricity. By 1995 the percentage had fallen to 13 per cent and most recently to 7 per cent. Although access to

electricity has improved considerably, there are islands where electricity is not available around the clock. In 1998, according to the Vulnerability and Poverty Assessment, more than 60 islands had electricity for 24 hours a day, together accounting for 55 per cent of the total population. In the central and southern atolls access to electricity was almost universal and available throughout the day. This situation was in contrast to atolls in the northern zone and those in the centre of the southern zone (Laamu and Gaaf Alif), where access was more restricted. Overall, nearly one in three of the atoll population enjoyed access to electricity for only a few hours a day. There were some islands that get electricity for only up to six hours a day.

(Box 2.4)

Transport With the exception of the ferry service between Male' and Viligili, the Maldives is without regular inter-atoll and inter-island boat services. On the islands, people are typically required to arrange a *dhoni* (boat) for themselves in order to travel to another island. However *dhonis* may not be available for hire and the costs of hire tend to be high. The accessibility of some islands is also poor. Some lack harbours and jetties, while access to others is severely impeded by shallow waters and coral reefs.

A quarter of the population is to be found on islands with more than 100 persons per *dhoni*. However, differences among atolls are pronounced. In several atolls such as Noonu, Baa, Alif Uthuru buri, Faafu and Dhaal, *dhonis* appear to be available in sufficient numbers to meet island transport needs, while in other atolls the numbers are more problematic. The Vulnerability and Poverty Assessment (1998) revealed that transport to the atoll capitals may often be a problem for island populations. One

in five of the atoll population is to be found on islands where *dhoni* services to the atoll capital are limited to three or fewer times per month. Alif Uthuru buri appears particularly disadvantaged, with three quarters of the population reporting that they are unable to travel more frequently to the atoll capital. In Noonu also, 60 per cent of the population is unable to travel to the atoll capital more often than three times a month. For one third of the population found mainly in atolls in the north central and south central zones, opportunities to travel to Male' are restricted to one or two *dhoni* services per months.

Box 2.2 High Cost of Infrastructure

The highly fragmented population distribution and the small size of many island communities greatly add to the costs of providing social services and infrastructure. The nation's total population of 290,000, for instance, if located on a single island, could be well served by a single hospital. The Maldives now has 6 hospitals, each equipped with facilities for surgery, and some 20 Atoll Health Centres to maintain services that still cannot be reached within 2 hours by many people. By the same token, a doctor who is required to service the needs of 5,000 people could adequately serve a population 4 to 5 times larger. Similarly, the minimum size required to sustain postal services, media services, and a judiciary is able to serve much larger populations.

These diseconomies of scale are exacerbated by the need to transport construction materials over long distances. With the implementation of regulations over sand and coral mining, such materials as cement and stone aggregates now have to be transported in far higher volumes from Male' to the outer atolls, and this further adds to the already high unit construction costs.

Such diseconomies rise exponentially as a function of distance and isolation. This applies, for instance, to telecommunications. In sea-locked countries like the Maldives, such possibilities are non-existent, requiring investments that many other small states are not required to make. These investments can be disproportionately high. In the Maldives, for example, the distances that separate the atolls cannot be bridged by conventional microwave technology for the provision of telecommunications. This leaves the country no option but to use more expensive satellite technology.

Telecommunication The communication infrastructure and facilities are most highly developed in Male' as compared to the atolls. Male' is well served by public telephones, newspapers and other sources of information. There has been an expansion in access to telecommunications. The number of telephone lines in Maldives has increased from 7631 in 1991 to 22,900 in May 2000. But most of the increase has taken place in Male; 17300 connections are in Male/Vilingili. Residential services are limited to all islands in Seenu Atoll, and in Foamullah, Thinadoo Island and Eydhafushi Island. At least one card phone (or more depending on the population) is available on every inhabited island. Island and Atoll Offices are connected by phone. A mobile phone system was introduced in November 1999. The network of base stations covers Male' and Ari Atolls. There are 5400 connections in Male' alone. Internet services were introduced in 1996. There are seven cyber cafes in the country which have been established with the intention of popularizing the use of information technology among young people. (Also see Box 2.3.)

Box 2.3
Access to Information

Print Media: There are three registered daily papers and about a 100 publications that are published weekly, fortnightly, monthly or with flexible periodicity. These latter publications are usually devoted to fiction or religious matters. Subject to national censorship restrictions, there is an increasing availability of international print media available now in Male. Outside of Male' there is one news bureau in Thinadhoo. Island news is typically restricted to official events and is fed to the press through the Atoll Office and the Ministry of Atolls Administration. Newspapers are transported to the Island Offices from the Atoll Office but on an irregular basis. Newspapers are sold in very few locations in the islands. On some islands, newspapers are displayed on billboards at central locations. Distribution of newspapers and magazines to the atolls is minimal and reading materials are scarce. Often school books and health pamphlets provide the only source of reading for families. While some of the larger islands have bookshops, these usually stock school books. Public libraries in the islands are non-existent and reading is not a typically observed habit in the islands. Transport to the atoll capital is a problem for many islands. Male' is well served by most sources of information and the situation stands in contrast to the one prevailing in other parts of the country.

Broadcast Media: Radio is the most important news, information and entertainment medium for the atoll population, with "Voice of Maldives" playing a particularly important role in the maintenance of contacts within the country. Virtually all households have access to VOM although northern and southern atolls face interference from stronger foreign stations transmitting on close wave bands. VOM can also be received at sea.

Television Maldives (TVM), the national television channel, broadcasts can only be received by households in Male' and the nearby islands. TVM depends heavily on outside material; a large proportion of air time is dominated by commercial Hindi cinema and cartoons. There is however daily international news from CNN. A second television channel, *TVM Plus* can be watched with the aid of a decoder as this is a subscription service and transmission is encrypted. Viewing is thus restricted to those who have paid the set fee. Since 1993 satellite dishes have proliferated in Maldives. Those who have had the service installed receive international television broadcasts. Satellite television is popular in Male. More than one half of the population in Male' have television sets, as compared to only 15 per cent of the atoll population. Even the total hours of television programming have increased from 3,803 in 1981 to 9,965 in 1995.

Various Sources

Box 2.4
Unequal Access to Infrastructure

- Almost a quarter of the population has no electricity in Ha Alif, Laamu and Gaaf Alif.
- More than 50 per cent of the population gets less than 6 hours of electricity a day in Haa Alif and Thaa.
- There is not even a single public phone on any of the islands in Haa Dhaal.
- In almost 54 per cent of the islands, there are no health facilities.

% of atoll population

	Electricity		Transport	Health		
	no Electricity	less than 6 hours of electricity	dhoni 3 times or less to Atoll Capital	no health Centre, Hospital or Private Clinic	Unsafe Drinking Water	
1	Haa Alif	24	62	28	64	38
2	Haa Dhaal	10	25	4	61	6
3	Shaviyani	7	44	41	96	5
4	Noonu	6	45	56	90	13
5	Raa	6	24	2	55	6
6	Baa	4	43	31	58	4
7	Lhaviyani	4	0	0	17	15
8	Kaafu	0	0	34	68	12
9	Alif Uthuru buri	4	0	73	64	4
10	Alif Dhekunu buri	3	18	53	44	1
11	Vaavu	2	26	19	42	0
12	Meemu	4	44	0	87	0
13	Faafu	10	20	0	52	1
14	Dhaal	0	0	0	78	8
15	Thaa	15	58	4	78	3
16	Laamu	23	55	21	50	3
17	Gaaf Alif	23	48	5	74	4
18	Gaaf Dhaal	13	41	35	48	2
19	Gnaviyani	2	0	100	0	10
20	Seenu	0	0	90	0	42
	Male	0			0	0
	Atoll Average	9	20	18	54	9
	Maldives	7	28		40	12

Source: Vulnerability and Poverty Assessment, 1998

Population Dispersal and Governance

Given the population distribution pattern and the scatter and separation of island communities by ocean waters, the Maldives faces unusual challenges with respect to governance. People's participation is constrained by geo-physical limitations on their ability to associate and organize. Nine of the country's 20 administrative atolls have less than 10 inhabited islands, while no atoll has more than 17 inhabited islands. Island population is usually in the range of 500 to 1000, and the smallest islands have only around a 100 people. Almost 80 per cent of all inhabited islands have a population of less than 1000. Of the 200 inhabited islands, 35 have a population density of less than 50 persons per hectare.

The 26 natural atolls are grouped into 20 major administrative units (Atolls and Capital). The constitution recognizes only a single tier of government in the country: the Government of the Republic of Maldives. The constitution also refers to the electoral divisions of the atolls and Male'. These divisions are for administrative purposes. The Government recognizes the historical and the ongoing importance of the atolls as the basic unit of administration, with the appointment of Atoll Chiefs to Atoll Offices and Island Chiefs to Island Offices

The country has a non-party election system where each candidate stands as an independent candidate. The President of the Republic is the supreme head of government elected for a term of five years. The People's Majlis selects a candidate for President from a list of applicants. On accepting the nomination, the candidate must receive a majority vote in a national referendum. The President is the final authority for the propagation of the tenets of Islam in the Maldives. A body appointed by the President and reporting to him conducts the administration of justice and all matters concerning Sharia.

Box 2.5

Legal, Regulatory and Justice Systems

Unlike many other countries, Maldives does not have a colonial past and system of laws to draw upon. This has meant that in the face of economic transformation and its attendant new complexities, new laws have needed to be drafted in a relatively short period of time for incorporation in and integrated and uniform manner within the existing legal system. This has placed a large burden on the drafters of laws and the People's Majlis. While Sharia will be maintained, the Government recognizes that some reforms and institutional strengthening are required to address the new economic complexities and global relationships that the Maldives is now experiencing.

Source: Fifth National Development Plan, 1998

The President appoints all judges to the courts and formulates rules of court, either directly or through the Ministry of Justice. The President is also the body of ultimate appeal from decisions of the High Court. Ministers are appointed by the President but may be questioned by the People's Majlis concerning performance of their duties and can be forced to resign if a no-confidence motion on their performance is passed. The People's Majlis is the legislative body that passes all laws (Box 2.5) except those matters that must be specifically addressed by the People's Special Majlis. The People's Special Majlis is composed of ministers, People's Majlis and 40 more elected representatives as well as eight more members appointed by the President. The public elects 42 of the 50 members of the People's Majlis (2 from Male' and 2 each from the administrative atolls), for a five-year term, the remaining eight being nominated by the President. The present political system has no formal parties. While there have been attempts to extend the electoral process to the atoll level to elect the atoll chiefs and advisory committees, this has not been entirely

successful. The 15th Parliamentary Elections were held in November 1999. The voter turnout was 77.4 per cent as compared to the previous elections held in 1994 when the turnout was 75.5 per cent.

The Ministry of Atolls Administration and its Southern and Northern Regional Offices, Atoll Offices and Island Offices are collectively responsible to the President for Atolls administration. The staffing in Island and Atoll offices vary depending on the size of the Atoll or island population.

A range of community organizations exists with varying functions, influence and activities. These include:

- Ward Committees functioning in the capital and in some other islands with relatively large populations. Except in Male', they are voluntary bodies, usually with a membership of about 15.
- Atoll Development Committees (ADC) that include members from the various Island Development Committees and are selected and appointed by the Atoll Chief. This Committee meets once a month in the capital island of the atoll as a consultative body to the Atoll Chief who is the chief administrator of the area. Women are eligible to be members of ADCs.
- The Island Development Committee (IDC) is the grassroots institution in the administration of each islands and is made up of permanent, elected and appointed members. Being a body of elected members, it functions directly under the Island office. Several islands have elected women as members following policy directives from the President and the Ministry of Atolls Administration.
- Island Women's Committees (IWCs) are established on all inhabited islands. Members are volunteers who engage in activities relating to social and economic development of islands. Some IWCs have grown in stature, running their own co-operatives, and conducting various training programmes. Others still depend on guidance from the Island Chiefs.

People's participation, is limited by the relative insularity of island communities, limited access to information and restricted transport and interconnections between islands. People participate mainly through social development organizations and associations. Traditionally Community Based Organizations, have been in existence in the Maldives albeit under the category of "clubs" or "associations" which include youth associations. There are close to five hundred such organizations and a large proportion of these are in Male'. Among the activities conducted by such organizations at the island level are sports, cultural events, island development (including installation of electricity and sewerage systems and construction of schools), religious training, awareness raising with respect to community development issues and so on.

Box 2.6
The Relationship Among Islands

Historically, the Maldives was characterized by small, self-regulating and tight knit communities unified by religion, language and culture. While the country is divided into atolls, it is worth noting that an atoll is not an economic, social or anthropological abstraction, but is based on geology and geomorphology. While the concept of an atoll has been endowed with economic and social dimensions, the pre-eminently physical characteristics mean that they exist without a nodal structure and are often without the various types of linkages that can be utilized for purposes of development strategy. Relationships between inhabited islands in the same atoll may be rudimentary or even non-existent, with relationships existing between the island and the "outside world" oriented not towards the atoll capital but rather with Male'. The absence of a system of nodal points of well-developed relationships between islands means that the "spread effects" of focal points and growth centres is bound to be limited, being often restricted to the immediate vicinity of the islands in which investments in social and physical infrastructure are made.

Source: Vulnerability and Poverty Assessment, 1998

In addition there are other NGOs that operate nationally. Among the Male' based NGOs are *Society for Health Education* (SHE), which concentrates on health and family welfare issues. SHE also works to increase health and social awareness through the use of the media, training and publishing pamphlets. Others such as *Foundation for the Advancement of Self-Help in Attaining Needs* (FASHAN), an umbrella NGO that focuses on assisting island based NGOs and other associations in identifying needs, formulating projects, awareness raising, capacity building, raising funds, and implementing monitoring projects in the field of development. It seeks to improve living conditions for islanders especially women, youth and children. Some of the issues in FASHAN engages with include gender, drug abuse and HIV/AIDS prevention. Another NGO, *CARE Society*, works for awareness raising and sensitization with respect to people with disabilities and works for their integration in the mainstream. The *Volunteers for Environment, Social Harmony and Improvement* (VESHI), are active in issues such as environmental pollution (including transboundary air pollution from neighbouring countries) and waste management. Other notable NGOs include *Writers on Environment* (WE), *Blue Peace*, and *Islamic Charity Association* (ICA).

NGOs operate within the legal framework, follow government policies mobilize people to participate in community activities. Their activities are typically service-oriented. Limited funds for programmes and administrative costs and limited human resources, however restrict the potential of NGOs to make a greater contribution. The Government regards NGOs as pivotal to socio-economic development and plans to engage them as partners in a systematic manner.

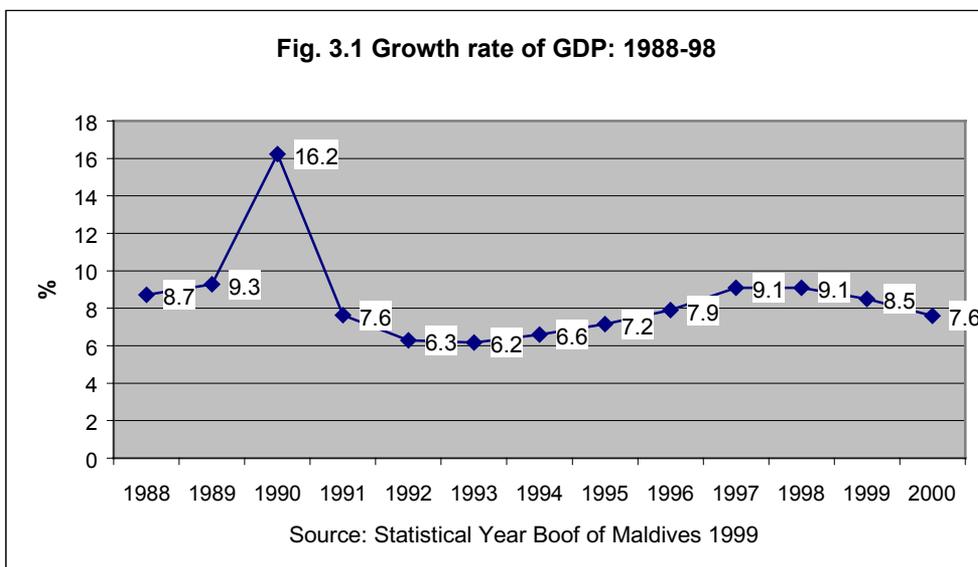
Ultimately, accelerating human development will depend critically upon partnerships that are forged between the government, the private sector and NGOs. It will also dependent upon the extent to which people participate more fully in setting priorities and shaping development outcomes.

MANAGING THE ECONOMY

The positive outcomes of economic expansion and of far-sighted investments in health and education are clearly visible in the Maldives. Even as the country is progressing rapidly, several improvements in the overall quality of human life remain to be realized. The challenge for this rapidly modernizing economy, is to expand economic opportunities in a way that enlarges choices for all citizens, prevents social disintegration, nurtures the environment and strengthens the indigenous culture. Until only two decades ago, Maldivians lived in small, insulated and self-sustaining communities. Today the country is face to face with the entire spectrum of global influences – economic, social and cultural. It is in this context that economic advancement should be translated into building and supporting equality, especially between men and women, consolidating social structures, and ensuring the realization by children and youth of their full creative potential.

Consistent Growth

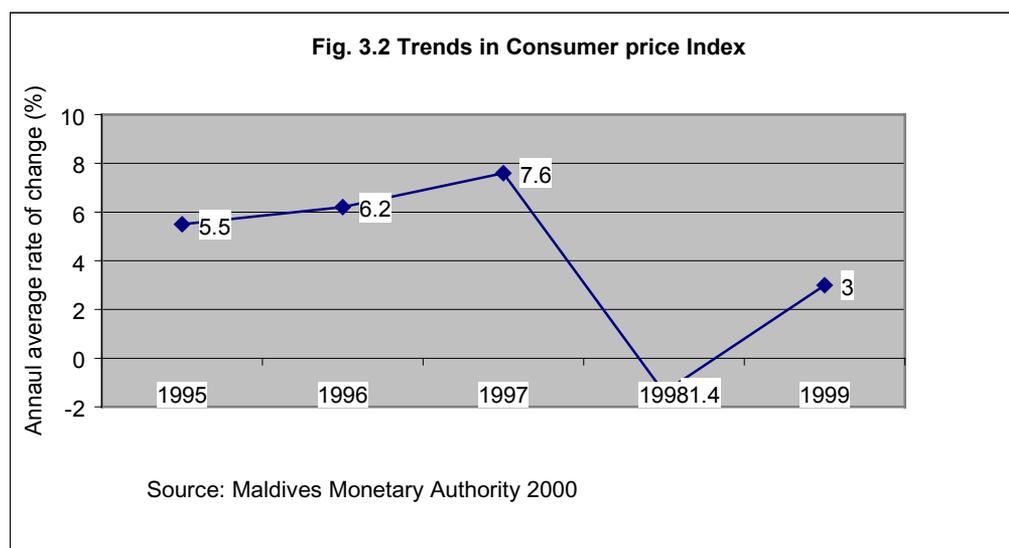
There has been an impressive growth in incomes in the Maldives in recent years. Through most of the 1980s, GDP grew by more than 10 per cent per annum. This growth spurt was severely reversed between 1990-93 by adverse developments in the global markets. International tuna prices fell, import costs rose sharply due to the Gulf crisis, and the recession in Europe led to a decline in tourist arrivals. As a result, the Government faced a serious fiscal crisis. Economic growth slackened, and the budget deficit (including grants) exceeded 11.3 per cent of GDP both in 1992 and 1993. This led to substantial borrowing from Maldives Monetary Authority and to almost a doubling of the Government's domestic debt. At the same time, growing domestic demand pushed up prices, and inflation went up from a single digit level in 1990 to 20 per cent in 1993. By 1993, the current account deficit rose to 16 per cent of GDP, and the import coverage of official gross international reserves fell below two months of imports.



The government responded quickly to the crisis, and in 1994, initiated a successful stabilization program. This helped to reverse the decline in growth rates and to re-establish fiscal stability. Between 1995-2000, real GDP grew on average by over 8% annually, never falling below 6% in any year (Fig. 3.1).

Sustained economic growth in the Maldives has been accompanied by a return to relative equilibrium in key economic variables. By 1998:

- Inflation that was 15-20 per cent between 1991-93 fell to 7.6 per cent in 1997; and to 3 per cent in 1998 (Fig 3.2).



- the overall budget deficit (including grants) dropped from 11.3 per cent of GDP in 1993 to less than 1.1 per cent by 1997. Preliminary data for 1998 suggest that the fiscal deficit fell to 2 per cent. When excluding grants, the overall budget deficit is estimated at around 6 per cent for 1998.
- External current account deficit fell from 25 per cent to 8 per cent between 1993-98. Preliminary data for 1998 suggest that the fiscal deficit was down to 2 per cent. When excluding grants, the overall budget deficit is estimated at around 6 per cent for 1998.
- Flows of net private capital and official aid have been increasing
- Domestic debt to the Maldives Monetary Authority has come down from 36 per cent of GDP in 1993 to 24 per cent in 1998.
- Merchandise exports, in current US dollar terms, doubled between 1993-98
- The external debt-to-GDP ratio fell from 60 per cent in 1993 to 50 per cent in 1997.
- The debt-service ratio has also fallen sharply

Structural Changes

Economic growth has been associated with a dramatic change in the composition of the country's GDP. Between 1987-97, the share of the primary sector in GDP fell from 17.7 per cent to 10.5 per cent, and the share of the tertiary sector went up from 74.4 per cent to 79.8 per cent (Table 3.1).

Table 3.1 Composition of GDP

	% of GDP		
	1987	1992	1997
Primary sector	17.7	14.4	10.5
Secondary sector	11.9	12.7	14.0
Tertiary sector	74.4	76.9	79.8
	100	100	100

Source: Revision 2

Between 1986-95:

- the primary sector: agriculture, fisheries (including the canning and freezing activities of MIFCO) and coral/sand mining grew by 3.87% per annum;
- the secondary sector: construction and manufacturing and electricity generation grew by 9.8% per annum; and
- the tertiary sector: distribution (trade and commerce), transport, communications, tourism (including construction of resorts and all activities undertaken by the resorts), real estate, services (including health education, water and sanitation, banking, media, post, etc) and Government core administration grew by 9.59% per annum.

Tourism has been the engine of growth for other sectors as well, supporting double-digit growth rates in transportation, communication, distribution and construction. Between 1996-97, the construction industry grew by –6.4 to 34.6 per cent per annum, and then recorded a 24.9 per cent growth in 1998 as tourist resort development activities were stepped up.

One of the most significant factors affecting growth during the last 15 years was the high level of capital formation particularly in the form of infrastructure investments. These investments set the stage for tourism to become the engine of growth for the economy.

Tourism and fisheries are the main sources of income. Together, they accounted for 44.4% of the country's GDP in 1987. Even in 1997, the dependency on these two sectors continued – though there was a slight decline in the share of these two sectors to 40.7% (Table 3.2). Although the share of fisheries as a percent of GDP fell between 1987-97 from 11.8% to 6.7%, it is still a major sector in the economy. The sector remains the principal source of livelihood to the majority of atoll population, providing direct employment to over 22,000 people.

Table 3.2 Share of GDP

	1987	1997
Tourism	32.6	34.0
Fisheries	11.8	6.7
Distribution	4.6	5.0
Agriculture	5.2	3.2
Government administration	9.0	10.4
Construction	2.7	3.3
Manufacturing including electricity	9.1	10.8
Transport	8.7	13.0
Others	16.3	13.6
	100	100

Source: Statistical Year Book of Maldives 1999, GDP Revision 2

Tourism started developing in the early 1970s through the initiative of the private sector and achieved significant growth in the last decade. Between 1987-99 tourist arrivals increased more than threefold, resort bed capacity doubled and bed capacity utilization increased from about 60 to 70 per cent. In 1999, close to 430,000 tourists visited the Maldives – more than one and a half times the country's population Table 3.3. In recent years tourism has accounted for over 33 per cent of GDP, one fifth of total employment, close to 30 per cent of the budgetary tax revenues and 70 per cent of total foreign exchange earnings from exports of goods and services.

Currently 84 resorts operate in the Maldives apart from some hotels, guesthouses and vessels. A majority of them are locally managed. Each resort occupies a whole island and includes all the necessary infrastructure for the guests and workers, including a power plant, a water desalinization plant as well as workers' quarters.

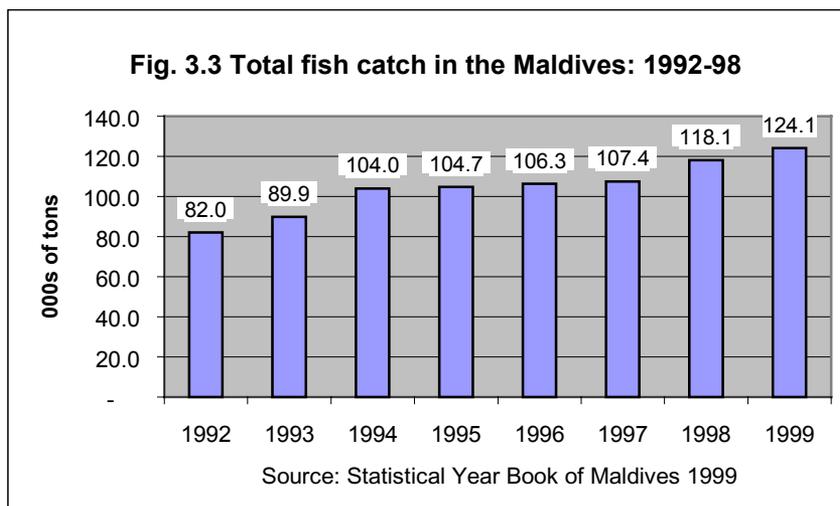
A recent study on the economic impact of tourism has revealed that almost as much as a third of the gross foreign exchange earnings from tourism leaves the country again to pay for consumption imports for resorts, remittances by foreign workers and to service foreign equity and debt.

Table 3.3 Tourism sector: key indicators

		1992	1993	1994	1995	1996	1997	1998	1999	2000*
Tourist arrivals	in 000s	235.9	241	280	314.9	338.7	365.6	395.7	429.7	234.2
Average length of stay	no. of days	8.4	8.7	8.4	8.7	9	8.9	8.8	8.7	8.5
Expenditure per night	\$ per person	70	70	77	77	87	87	87	87	..
Bed occupancy rate	%	66.2	64.8	67.9	70.5	72.8	77.4	76.2	70.3	70.4
Bed capacity	No. of beds	8645	9219	10376	11000	11784	12234	14158	15502	15558
Tourist resorts	Numbers	69	69	73	73	73	73	79	84	84
Contribution to GDP	% of GDP	33.4	32.6	33.5	34.4	34.9	34.0	33.2	33.1	33.3
Direct employment	Numbers	7297	7880	10149	12699	10537	10511	10624	23118	..
	including expatriates									

Source: Country Economic Review: Maldives June 1999 and Ministry of Tourism; * Up to end June 2000
1995-1999 (Revision 2) and 2000 (Revision 1)

Fish Catching continues to remain a major sector despite the decline in the share of its contribution from 9.7 per cent to 6.0 per cent between 1992-2000. Traditionally, fisheries have been the principal source of livelihood to the vast majority of the Maldives' atoll population, providing employment and much of their nutrition through commercial, artisanal and subsistence fishing. The sector provides employment and livelihood to 22,000 people a majority of whom live in the atolls. Today about one quarter of the local labour force is engaged in the fishing activity itself, and more are employed in downstream processing activities that prepare frozen, canned, chilled/fresh, and salted/dried fish for the export market.



Fish catch has increased in recent years – from 71,200 tons in 1989 to an estimated 124,000 tons in 1999 (Figure 3.3). Export earnings from the fishing sector depend largely on the international prices of tuna. Despite the fluctuations in international tuna prices, export earnings have risen steadily over the years reflecting an increase in the physical volume of fish exports as well (Table 3.4). Fishing is totally dominated by the private sector. Export of fish used to be under the monopoly of the Maldives Industrial Fisheries Company Limited (MIFCO). Exports have been gradually and partially liberalized, and MIFCO now has monopoly only over canned and frozen skipjack tuna exports.

Table 3.4 Fisheries Sector: Key Indicators

	1989	1994	1995	1996	1997	1998	1999
Share in GDP (%)	11.3	8.4	7.8	7.3	6.7	6.7	6.5
Annual VA growth rate (%)	6.9	2.0	0.0	1.3	0.7	3.9	
Total Fish catch ('000MTs)	71.2	94.0	104.6	105.4	101.8	118*	124*
Total Fish Export ('000MTs)	51.8	60.6	57.2	65.4	67.9	71*	69*
Fish Exports (millions of US\$)	34.7	36.7	37.0	48.7	58.2	58.4	39.3**
No. of Fishermen ('000)	22.0	22.3	22.0	22.1	22.5	21.9*	22.1*
No. of active fishing vessels	1542	1776	1669	1626	1578	1271*	1206*

Source: World Bank, 1999 p.20; (*) Ministry of Fisheries and AMR June, 2000; (**) Exchange rate 1 US\$=11.42 MRf 1995-1999 (Revision 2)

Economic Vulnerability

A little over a decade ago, the country's economy rested on the three pillars of shipping, fisheries and tourism. The first of these three pillars collapsed in the 1980s when the national shipping line (MSL) was affected by a series of negative developments occasioned by the protracted slump in international shipping. Today, total production from tourism and fishing accounts for one-third of the country's GDP, two-thirds of its foreign exchange earnings, and more than one-fourth of government revenues. The economy remains highly sensitive to the vagaries of international economy on two counts: economic fortunes of the tourism generating countries and trends in international tuna prices.

Both fisheries and tourism being export-oriented industries are vulnerable to external shocks and global fluctuations over which the Maldives can have little control. At the same time, the Maldives has to import practically everything. In 1997, total merchandise imports (free on board) were estimated at \$307 million – about three times the value of total exports. This has led to an extremely open Maldivian economy.

Table 3.5 Exports and Imports of Goods as % of GDP

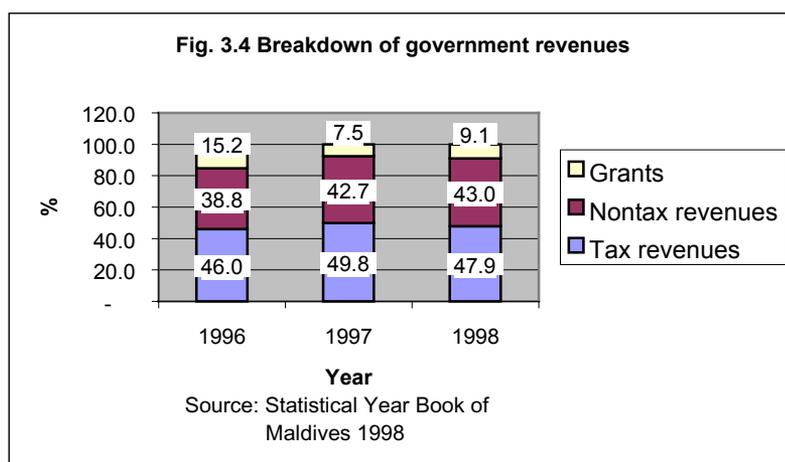
	Exports	Imports
	(as % of GDP)	
1989	34	59
1990	36	56
1991	31	58
1992	23	59
1993	16	55
1994	21	55
1995	21	59
1996	17	58
1997	18	61
1998	19	60

Source: Statistical Year Book, 1999, 1995-1999 (Revision 2)

The exports-to-GDP and imports-to-GDP ratios have been well over 20% (Table 3.5). As a consequence, the economy is extremely vulnerable to small variations in international conditions especially in tuna prices, tourist arrivals, and import prices. The narrow economic base and the extreme openness of the economy makes the Maldives particularly susceptible to external shocks over which it has little or no control.

Financing Development

Being a small country dominated by two sectors – fisheries and tourism – policy choices before the government are quite limited. In 1998, government revenues comprised of taxes (48%), nontax revenues (43%) and grants (9%). Import duties are a major source of tax revenues accounting for 52 per cent of all tax revenues. Tourism tax accounts for an additional 29 per cent. The largest component of non-tax revenues (over 30%) continues to be resort lease rent (Figure 3.4).



In recent years:

- fiscal revenues have gone up from 32 per cent in 1992 to 44 per cent of GDP in 1998.
- Non-tax revenues have risen sharply – reflecting the improved performance of both tourism and state-owned enterprises.

Taxation The tax base is narrow i.e. primarily tourist taxes and customs duties and highly dependent on external factors. The only direct tax is bank profit tax on net profits of commercial banks; there is no income tax, no property tax and no goods and services tax. In 1998, import duties were expected to account for 52 per cent of all tax revenues and tourism tax for another 29 per cent. This reflects the following aspects:

- The dualistic nature of the economy with a relatively underdeveloped domestic sector and highly developed enclave tourism sector which is the major engine of growth, contribution over 65 per cent of foreign exchange earnings from exports of goods and services;
- The openness of the economy with imports accounting for 60 per cent of GDP in 1998;
- Inadequate institutional, financial, legal, accounting and administrative structures both in businesses and in government.

Efforts are on to expand the range of taxes, create a robust tax base and establish an efficient system of tax collections. The Government is contemplating levying a low rate of corporate profit and rental income tax. It is also examining the implications of a land tax when private ownership of land is introduced. Under active consideration is also a simple goods and service tax (GST) to augment and stabilize tax revenues. The newly established Department of Inland Revenue (DIR) is being strengthened for the consolidation of various existing taxes and implementation of new taxes.

Profit transfers from public enterprises and rental income from Government land contribute over 66 per cent of non-tax revenue. Tourist bed tax plus the rent from lease of resorts account for over one quarter of total Government revenue. After 1993, tax revenue rose due to increased import duties (resulting from the surge in imports derived from the tourism boom) and the improved tourist tax receipts (resulting from the expansion of tourist arrivals). Non tax revenues rose due to newly negotiated royalties with foreign air transport operators in 1995, improved profitability of several public enterprises and non-financial public enterprises increasing repayment of debt to government and upward harmonization of resort leases.

External assistance The growth in external assistance has been maintained by increasing recourse to concessional loan financing. Concessional loans have financed an increasing share of capital expenditures increasing from less than one-quarter in the period 1988-91 to nearly one-third in the period 1994-96. Grant aid has remained more or less the same in nominal terms over the past decade. Grants as a proportion of government revenues declined from 29.9 per cent in 1991 to 15 per cent in 1995 and further to 8.6 per cent in 1998. Concessional loan financing has increased, and its share in financing capital expenditures has gone up from less than 25 per cent in 1988-91 to nearly one-third in 1994-96. Nearly 80 per cent of the assistance received from UN agencies is in the form of loan assistance through IDA and IFAD. Grant aid has remained more or less the same in nominal terms over the past decade.

Table 3.6: Aid disbursement by type of assistance 1988-96

	Disbursements (in Rf. millions)			
	Grants	Loans	Total	Grant component (%)
1988-90	68.8	24.6	93.4	74
1991-93	78.6	64.1	142.7	55
1994-96	71.2	82.1	153.3	46

Source: Government of the Republic of Maldives (1999)

Managing Public Expenditures

In the early 1990s, grants from the international community declined and, at the same time, domestic expenditures remained high. The result was a large budget deficit. The Government sought to stabilize the economy by tightening control on public expenditure and also reducing the levels. Between 1993-98, the expenditure-to-GDP ratio fell from 39.3 per cent to 34.9 per cent of GDP. This has happened largely by cutting down the size of the development expenditure from over 13 per cent of GDP to less than 12 per cent in 1997-98. In absolute terms, however, the annual level of development expenditure has remained at around Rf800 million (around \$70 million) in recent years – about 30 per cent of which is spent on economic services and the rest on social and public services. Current expenditures have however continued to grow steadily from about 26 per cent of GDP during 1991-93 to over 30 per cent in 1998. Part of this is explained by the increasing employment in the public sector, and the expansion of personnel in the social sectors to cover more schools and hospitals.

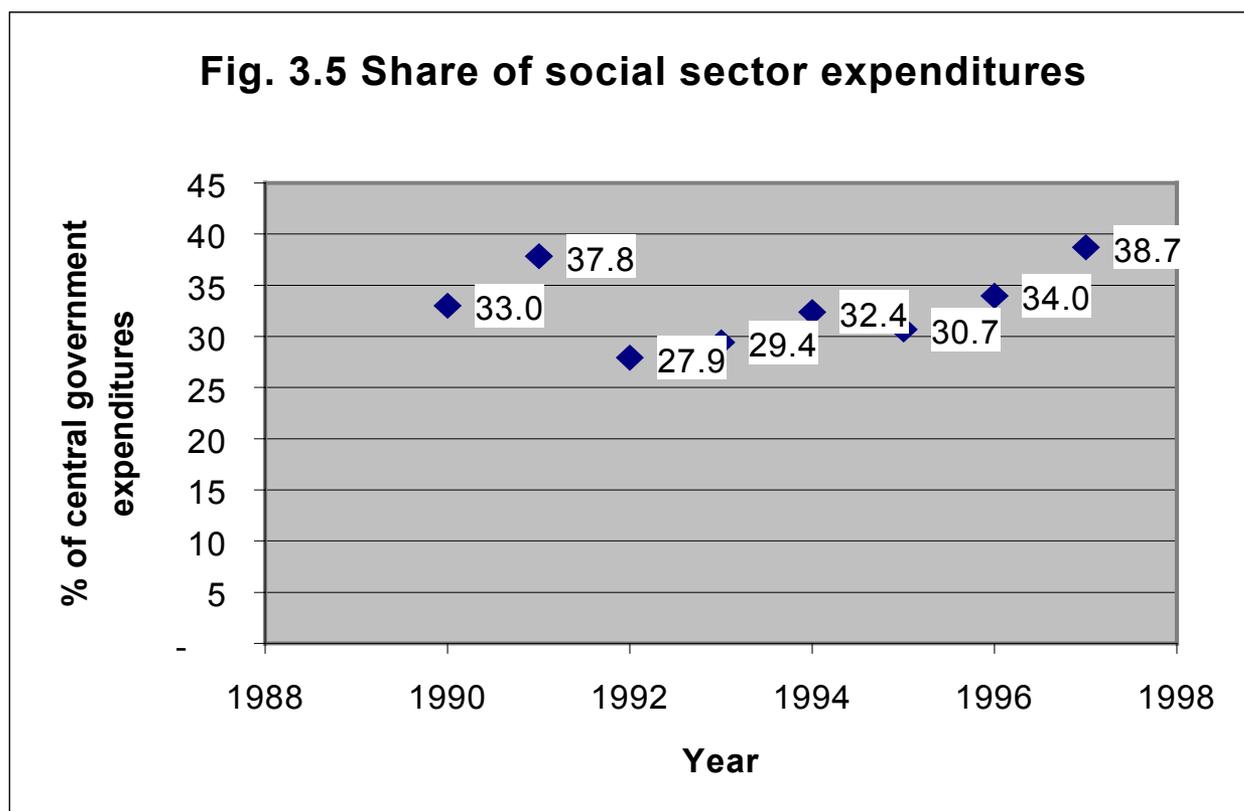
Public expenditure on social services The period 1988-1991 showed exceptional growth rates in Government expenditure on social services particularly health and education. While it has continued to increase since 1991 the rate of growth has slowed down.

The proportion of total expenditure spent on social services decreased from around 40 per cent in 1988-89 to 30 per cent in 1992-96. In 1997, the proportion went up to 39 per cent and up to 41.44 in 1999 (Table 3.7).

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Education	32.3	47.3	49.5	52.1	48.2	42.4	42.8	42.5	44.9	45.6
Health	47.0	35.0	31.0	24.2	29.2	32.6	33.1	28.3	23.8	25.2
Social security/welfare	5.6	5.6	5.1	5.8	9.9	9.9	8.3	8.9	6.6	5.7
Community programmes	15.1	12.1	14.4	17.9	12.8	15.1	15.7	20.4	24.7	23.6
	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Statistical Year Book, 1998 & 1999

Within the social sectors, allocations to education went up from 32 per cent to 46 per cent between 1990-99. But allocations to health have fallen sharply during the same period – from 47 per cent in 1990 to 25 per cent in 1997 (Figure 3.5).



Impact on Income Poverty

Both economic growth and the patterns of public expenditures particularly on the social sectors have an impact on income poverty.

The income poverty line for the Maldives has been defined as Rf. 600 (US\$ 51) per month – income considered essential for every family to meet its food and basic needs. Using this criterion, almost 40 per cent of the rural population fell below the income poverty line. An estimated 30,000 persons, equivalent to 15 percent of the population are estimated to live on incomes of Rf. 7.5 per day or less. The same survey (VPA, 1998) estimated that the annual average household monetary income was between Rf.1300-1800 (US\$ 68-111).

The expansion in tourism and the fishing industry in recent years has augmented national income. But this has not necessarily meant an improvement in income levels for *all* households. Nearly 25 per cent of the poorest population is to be found on 19 islands that are spread throughout the Republic. A generalization about rich and poor islands cannot be made for poor people can also be found in islands with the highest average incomes – and even in Male'. For instance, Male' has an estimated 4,500 poor people – the largest number in the country. This may seem counter-intuitive given that Male' is by far the richest island in terms of per capita income.

The Maldives produces little of what it consumes. Local produce includes coconut, banana, papaya, breadfruit, chillies, sweet potatoes and watermelon. Traditionally the staple diet consisted of breadfruit, sweet potato, fish and coconut, foods that were available in abundance. However, food production failed to keep pace with the demands of a growing population and during the middle of this century rice and wheat were introduced to complement the local staples. The dependency on imported foodstuffs, uncontrolled market prices for most food and an inflation rate of 7.6 per cent in 1997 has lowered the ability to command goods and services among many households in the country. The staple foods of the rural populations such as rice and flour are imported and are supplied by small independent operators who purchase their stock in Male'. Given the lack of a regular transport system and the lack of storage facilities in the islands, any break in this independent supply (such as due to adverse weather) can result in food shortages for rural populations. A small percentage of the population experiences occasional food insecurity and this may be linked to under nutrition and malnutrition. According to the Vulnerability and Poverty Assessment (VPA) 6 per cent of the population reported a food crisis in the previous year. The problem is the most pronounced in atolls in the south central zone, where more than 10 per cent of the population experienced food insecurity. One half of those experiencing food shortages for periods longer than 30 days were to be found in Laamu, Gaaf Alif and Gaaf Dhaal. The lack of purchasing power was the main reason given for food insecurity even in Male' where disposable income is generally higher than in the atolls.

Family income from fishing and other local trade is typically adequate to meet the cost of traditional food supplies. But a diverse nutritional diet often tends to be outside the reach of many. The distribution of fruit and vegetable imports throughout the country is also not equitable. Male' and the resort islands receive the bulk of these items. Because the price of these items is high, the consumption of fruits and vegetables is

mainly confined to higher income groups of the urban population. In 1994, for instance, less than 30 per cent of the children surveyed were found to consume fruits and vegetables.

Impact on Employment

To a large extent, the quality of growth is what matters – not the quantity. And one way of assessing the quality of economic expansion on people's lives is to see how employment opportunities are impacted by growth. And in the Maldives, women have not benefited as much as men.

Women in the Maldives have had major roles to play in both the political and economic activities. Among the several monarchs who ruled the country before it became a republic were three Maldivian queens. According to the Constitution, most recently revised in January 1998, being male is a necessary qualification to be elected as the President or Vice President of the country. Women have equal rights to vote and have the right to seek public representative office. The total number of eligible voters among women was lower than men by 6688 in the November 1999 elections. However, they had a higher voter turn out percentage of 84.3 as compared to 71.2 for men indicating widespread political awareness among women.

The first political party set up in the Maldives in the early '50s, consisted of 4741 members of whom nearly one third were women. In the same party 2 women and 3 men were elected as honorary chairpersons.

Box 3.1

Island Women's Committees

In 1983, the National Women's Committee established women's groups known as *Island Women's Committees*. They were established in inhabited islands with the aim of increasing women's participation in community activities and national development. These committees are semi-NGOs working under the guidance of the MWASW. The members of the IWCs consist of women elected from the island community. The Island Chief is the advisor to the Committee.

There are 215 IWCs altogether. Some IWCs are well organized and have successfully involved women in activities related to the social development of the island such as the construction of women's mosques, schools and health centres and the renovation of school buildings. Economic development projects have proved less successful. Some however have limited their development activities to the traditional women's tasks of sweeping the island, rope coiling and, preparing food for official guests and visitors.

It has been reported that women sometimes are not clearly aware of the purpose of IWCs or that they were seen as means to increasing women's participation in island and atoll development projects. In one survey, women expressed a desire to play a wider role in community activities but were unable to articulate how this could be achieved.

The 1994-98 a UNICEF programme aimed at improving the capabilities and strengthening the role of the IWCs through establishing Island Women's Centres on 50 selected islands, training members of IWCs in managing such centres. Island Women's Centres have now been opened in ten atolls. Training programmes and workshops on leadership, women's centre management, project planning and gender sensitization have been conducted in selected atolls. The project has however faced difficulties in the availability of resources for construction, the dispersed nature of the projects rendering training and supervision difficult and the fact that IWCs are not seen as a priority on the islands.

Source: UNICEF, Situational Analysis of Women and Children in Maldives, 1998

Also the advisory committee to the party consisted of 3 women and 13 men. Today, despite legislation women's participation in the national political sphere and in leadership positions in the decision making process is extremely low. The total number of elected women in the 1999 elections was two. Since there are also three other women in parliament among the eight, nominated by the President the total number of women MPs is now five; that is five out of 50 or 10 per cent.

The number of women in senior government positions in 2000 i.e. above the level of Assistant Director, is 134 as

compared to 800 men (Table 3.8). Whereas opportunities within the government have widened, women continue to move into occupations that “fit” the traditionally accepted role of women in nursing, teaching and clerical jobs. In Male' there is an increasing trend of women working in offices as professionals administrators and clerical workers. Expansion of their participation in finance, insurance, and business is developing albeit slowly. The provision of childcare facilities in the capital would draw even more women into the labour force because of the increasing demand of the labour market in Male' and the changing aspirations of women.

Table 3.8 : Women in Senior Government Positions (%)

Designation	1996 Directory of Women	2000
Ministers	5	5
State Ministers	0	0
Deputy Ministers	0	6
Director General & Executive Directors	0	9
National Security Services Officers	8	0
Atoll Chiefs	0	0
Directors	14	14
Deputy Directors	14	9
Assistant Directors	22	12
People's Majlis	6	10
Appointment to Committees	-	20

However, for a majority of women in the Maldives, employment opportunities for women have not kept pace with development and women from the islands have been more disadvantaged. Women on the atolls continue to have large families and spend most of their time in the home caring for and maintaining their family while men leave their homes to fish, or migrate to other islands for employment. In some atolls, one-half of households are female headed. Women remain involved in the traditional but unpaid tasks of community life such as the instruction of children in traditional or religious schools, sweeping the island, beaching *dhonis* (Maldivian boats), cooking meals or preparing food for community events. Women's domestic work and their contribution to the national economy is not reflected in the computation of the GDP. While their rates of participation have declined, women are engaged in activities such as fish processing, agriculture and craft making that are based at or near their homes to enable them to take care of children and assume other domestic family responsibilities. There are few avenues for wage employment on the islands. In Male, where women have greater access to wage employment, it is likely that they bear the double burden of work both inside and outside the home. Facilities such as child care services that support women's participation in employment are absent.

Socio-economic change has reinforced the separation of tasks between the sexes and exacerbated inequalities. A reduction in traditional jobs within the fishing industry has caused a decline in women's participation in the labour force. Women traditionally processed the fish caught by men, producing "Maldivian fish" that was recognized as a delicacy, especially in Sri Lanka. When "Maldivian fish" formed the main merchandise export of the country, the participation rate of women in the labour force was over 50 per cent

which, at the time was one of the highest participation rates in the developing world. The modernization of the fishing industry has enlarged men's opportunities to increase their catch, sell it to collection vessels and the fish is subsequently exported in frozen form or processed at the canning factory. These developments have greatly curtailed opportunities for women to engage in fish processing and, as a result, their participation rate declined to 21 per cent in 1985, falling further to 19 per cent in 1996. Today the Maldives has one of the lowest female participation rates in the world.

The strong growth in the tourism industry has increased employment opportunities for men significantly - but not yet for women and families. The work involves moving to and living on resort islands away from their families and 'home' islands. Such a move is not acceptable to many Maldivian women because of their family and domestic responsibilities and because of continuing traditional beliefs about the role of women, and culturally induced fears of women's exposure to "moral" danger or external influences that are inconsistent with prevailing cultural and religious sentiments. In 1996, of the nearly 5000 Maldivians employed in the tourism sector, less than 100 were women.

Much of the income earned by the men is remitted to their home island and this has reduced the need for women to earn an income of their own. The increases in household income brought about by the growth of tourism have contributed to a decline in traditional cottage and handicraft industries, some of which were traditionally undertaken by women. The withdrawal of women from these activities has further reduced the participation rate. The other factor, which has contributed to a decline in labour force participation, has been the increasing enrolment of girls in primary and secondary school education. Young girls in the islands at present have few opportunities to continue their education beyond primary level. In the absence of opportunities for employment or higher education, girls tend to marry and begin their families shortly after finishing school.

New developments in industry such as the establishment of canning and garment factories have also not attracted Maldivian women into the workforce, despite special transport arrangements. For example, at the tuna-canning factory in Felivaru, only 30 women are employed from neighbouring islands as against more than 100 women from Sri Lanka. Similarly, Sri Lankan female workers, possibly because of their willingness to work longer hours for lower wages, dominate the garments sector.

In recognition of the low participation rates of island women in economic activities the National Development Plan recommended programs of economic empowerment for women with the aim of addressing and promoting women's decision making abilities and access to assets and resources. However, these programs serve to reinforce their domestic roles (sewing and embroidery courses) rather than creating job opportunities in different sectors.

The challenge before the Maldives is to ensure that the benefits of economic growth are distributed more equitably throughout the economy.

This page is intentionally blank

CHAPTER FOUR

CHALLENGES AND RESPONSES

Many of the challenges that the Maldives faces assume an entirely different significance given the peculiar geo-physical context of the archipelago. The Maldives faces a set of unique challenges today. Accelerating human development calls for special focus on five key areas: ensuring balanced development, enlarging employment possibilities, managing natural resources, establishing a responsive governance, and investing adequately in children.

Ensuring Balanced Development

The State has made and continues to make major efforts to provide the Maldivian population with the social and physical infrastructure required to raise standards of living and to improve the quality of life. The concentration of investment, development and infrastructure in Male' has resulted in serious overcrowding of the island, while also marginalizing whole communities or fragmenting individual families living in outlying atolls. This situation of uneven development was an inevitable outcome of the geophysical nature of the Maldives. Many other factors, as discussed in the previous chapters, have contributed to the uneven patterns of human development. These include, for instance, the high costs of transport and of providing and maintaining infrastructure (often 4-5 times the level recorded in continental developing countries), long distances, inclement weather conditions, insufficient availability of trained persons who could be located in-situ and limitations on supervision and communication, as well as diseconomies of scale.

A series of projects have been launched over a period of time to integrate the islands into the mainstream economy. In 1978, the concept of atoll development was formulated as an instrument to accelerate development in the outer regions. This was sought to be achieved through the provision of basic physical and social infrastructure and the co-ordination of sectoral development programmes. Co-ordination was entrusted to a new ministry – the Ministry of Atolls Administration. The concept of Integrated Atoll Development (IAD) guided programme design and policy formulation. Of late the Government is in the process of addressing

Box 4.1

Planned Development in the Maldives

The Maldives has planned its development for over two decades. At the time of writing, the country is at the end of the Fifth National Development Plan (1997-2000) period and in the process of finalizing the *National Vision 2020*, a process which was launched by the President on the occasion of Independence Day in July, 1999. The purpose of the Vision exercise is to provide national planning with key focal points of activity and long term perspectives. Some of the elements include concerns for population growth, the pattern of human settlement, increasing labour force participation rates, human resources development, social, human and infrastructure development, sustainable environmental management, and economic diversification. The Fifth Plan recognized the constraints to national development as including, small widely dispersed island communities, limited land and land based resources, vulnerable, low-lying islands and fragile reef and lagoon environments, limited skilled human resources, high rate of population growth and an under developed legal system. At the same time the many opportunities were defined as the country's diverse and extensive marine resources, its extensive marine environment and availability of tropical islands for resorts, its geographical proximity to emerging South Asian markets, its stability and unity, the freedom accorded to women to participate in social, political and economic affairs, and the nation's resourceful work force. During the Fifth Plan period efforts were ongoing to:

- reduce population growth
- enhance national education and skills level for employment
- pursue appropriate growth strategies
- establish sustainable and balanced provision of infrastructure
- implement sound environmental and natural resource management
- strengthen legal, regulatory and justice systems
- manage planned human settlement

Source: Fifth National Development Plan, Vol I, MPHRE, 1998.

the need for balanced development through two principal means: population consolidation and the development of regional growth centres.

In the past, populations of even the smallest islands demonstrated a strong attachment to their home islands and this provided an impulse to the Government to continue its policies and programmes for the decentralized provision of infrastructure and services. However, there is increasing evidence of changed perceptions and priorities among island populations which is resulting in both a desire and a readiness to move to larger and better serviced islands. This desire has come out of

- the greater importance being accorded to education and health services,
- the increased recognition of the importance of infrastructure and services as a prerequisite for entrepreneurship, economic activity and the growth of productive employment, and,
- the growing acceptance of the vulnerability of small low lying islands to environmental damage, manifest in the high incidence of beach erosion and to the eventual consequences of climate change and projected sea level rise.

The Vulnerability and Poverty Assessment revealed that 20 per cent of the nation's most vulnerable population are to be found on 90 islands, many with small and under-serviced populations. The Population and Development Consolidation Programme, under which the Government seeks to systematically resettle populations and reduce the number of inhabited islands from 200 to around 80 in a 10-15 year time frame, it is expected will prove to be a powerful instrument for reducing disparities in incomes and opportunities existing between Male' and the atolls, make it possible to achieve more balanced spatial distribution of the population, reduce long term costs of development as well as achieve greater economies of scale.

Through the two Regional Growth Centres, one each in the North and South, the Government

seeks to open up the outer regions for development in much the same way that the Central region has developed under the influence of the tourism industry. In addition to tourism, opportunities to exploit the untapped marine resources of the Maldives' Exclusive Economic Zone (approximately 0.86 million km² with an accessible area by the current fleet of mechanised *dhonis* of some 200,000 km²) using modern and efficient fishing techniques will provide the stimulus for regional development. But in opening the outer areas for economic development, the Government recognises the need to deliver the appropriate infrastructure in support of regional development and for the people living there. Key infrastructure investments include development of port facilities, airport upgrades, provision of transport infrastructure and

**Box 4.2
Decongesting Male'**

Reclamation of additional land in Male' is in its final phase and does not provide a long term solution to the housing problem in that city. The current number of dwellings in Male' meets around 50 per cent of housing needs. At current rates of growth, the natural increase of the present population will add 18,000 new inhabitants to the islands population, a figure that excludes an estimate of the additional growth that will result from continued migration. To ease the pressure on Male' and improve thereby the quality of life of residents there, Villingili a neighbouring island and former tourist resort, is under development as a satellite town. The Hulhumale Land Reclamation and Development Project is the largest and most complex land reclamation and development project ever undertaken in the Maldives. The project seeks to establish a new land frontier required to meet existing and future needs for housing and industrial and commercial development. The project, it is likely will redirect and discourage migrations to Male, especially from the nearby islands of the central region, and help to gradually solve existing congestion in the city. Further through providing incentive schemes, small island communities that are socially and economically disadvantaged, will be resettled on the larger island with quality physical, economic and social infrastructure and environmental protection. The development of Regional Growth Centers, at present one each in the North and the South, is another strategy to provide equitable development in the outer atolls and reduce the in-migration to Male.

services, public utilities including water supplies, sanitation services and power, communication, education and health facilities as well as community facilities. In addition, employment generation through private investment has been identified as the engine for growth in each centre.

Investing in children

To a great extent, the future of the Maldives will depend considerably on the opportunities that its children have to realize their full potential. The young in the Maldives – children and youth – account for almost 44% of the country's population. Efforts have been made to address many of the basic requirements of children. Physical provisioning of schools, for instance, has been extensive. However, the focus of attention must now include quality considerations. Several special efforts to address many of the unfulfilled rights of children have been initiated by the government. These need to be assessed and further intensified.

In February 1992, a professional Government agency, the *National Council for the Protection of the Rights of the Child* was set up to monitor the National Plan of Action for Children and to promote adherence to the principles of the Convention on the Rights of the Child. The Council comprises 15 members from 13 different organizations including ministries and other Government bodies. The *Unit for the Rights of the Child* was established in November 1992, and functions as the secretariat to the Council. It operates under the administrative umbrella of the *Ministry of Women's Affairs and Social Security* and deals with all issues related to children's rights. This includes their publicity, promotion and implementation. Its responsibilities include (a) giving advice on necessary legislative changes (b) raising awareness on children's rights (c) improving information on the situation of children in the Maldives (d) developing an island-based national database to collect and store information on cases referred and (e) to offer counseling services to children and families. The URC compiles, publishes and distributes data from islands to relevant offices within the Government. Whilst recognizing that they have a mandate to monitor and draw attention to the special needs of those children who are especially vulnerable because of disability, neglect, abandonment or abuse, the URC now appreciates the need of moving into a rights approach focusing on *all* rights to *all* children. The promotion of children's participatory rights is done through integrating child rights education into schooling, developing participatory initiatives for children so they can recognize and voice their opinions. The URC is faced with a shortage of trained staff and financial resources and inadequate physical facilities.

The CRC has been translated into Dhivehi and audio-visual and print materials have been broadcast or distributed nationwide. Special efforts have been made to reach all hospitals, health centres, clinics, schools and other institutions on the islands. TV Maldives and Voice of the Maldives regularly discuss topics of relevance to the CRC. The URC plans to conduct regular events to sensitize professionals and officials to children's rights. The URC also facilitated the visit in January 2000 of an eminent lawyer from the University of Alexandria whose task it was to examine the fit between the Maldivian Child Act, Sharia'a Law and the Convention on the Rights of the Child. Recommendations are still being debated. The URC is engaged in a two-year plan to improve the child protection system, which aims to create Local Child Protection Committees and local volunteer counselors.

Based on principles contained in the CRC, some national laws have been reviewed and amended. For example, legislation in relation to juvenile justice has been amended to restrict criminal proceedings against children in favour of efforts at rehabilitation rather than inflicting punishment. The family law, which is under discussion aims to improve the situation of women and protect the rights of children caught in parental disputes. The court will be empowered to inform employers to deduct a minimal amount from their male employees' salaries if they fail to provide child support in situations of divorce. A set of guidelines for the investigation, adjudication and sentencing in respect of offences committed by minors was approved in February 1999. The guidelines indicate the age of minority as 16, children 7-14 are not criminally liable except in serious cases which include those acts prescribed by Hadd under Sharia'a. The normal sentence is prescribed as rehabilitation at a residential unit; in certain cases by virtue of an agreement the child can be held under house arrest at home instead and they may attend school if accompanied and are visited by social workers. The guidelines make it possible for a member of URC to be present as an observer at all court cases involving children.

Traditionally the family has absorbed "difficult" or abandoned children. But with changes in traditional family structures, there is a growing need for state care. The *Education and Training Centre for Children* was established in 1979 on Maafushi Island and is presently run by the Ministry of Education. The Centre provides residential care for boys in the age group 9-16 years, who have been abandoned or have behavioural or educational problems and boys who display deviant and/or anti-social behaviour or those who have usually been referred by the National Security Services (in connection with drug abuse). Children are referred to the Centre by the URC. Basic needs for food, shelter and clothing are adequately met however there is a concern that inadequately met cognitive and emotional needs may lead to recurrence of behavioural problems. Girls who have been abused or neglected, unlike boys in similar situations, do not have a facility where they may be admitted for care or rehabilitation. Sometimes girls are housed in the *Guraidhoo Island Home for the Elderly and Disabled* for the purpose of protection. This is acknowledged as being totally unsuitable. The *Children's Reform Center* is a separate facility for boys under detention or awaiting trial and is located on Himmafushi Island. The number of boys at any one time is about 20. Girls under detention are housed in the women's prison with adult offenders and without the staff or facilities afforded to boys in the Reform Center. Additionally a separate *Child Protection Unit* at Police Headquarters was established in 1999. The URC and the CPU have been seeking ways to work together more closely in matters relating both to juvenile justice and child protection. There is some sharing of training and representatives from both units meet on a regular basis to visit children in the Reform Center. While counseling services are virtually guaranteed in Male, there is a lack of trained counselors in the atolls, limiting the possibilities for formal counseling.

Enlarging Employment Possibilities

Generating jobs to fulfil the aspirations of the younger generation is a prime challenge facing the Maldives. Expatriates do a significant proportion of low-skilled and high-skilled work in the Maldives. Especially in the situation of low-skilled work, which Maldivians are reluctant to take up because they regard it as menial, foreigners, who come from countries where the situation is worse, work for low wages. The very limited opportunities for further education mean that only a small proportion of Maldivians are equipped to

undertake high-skilled work. Improved levels of family income and the extended socio-economic dependence of individuals on their parental households, result in the perception among young and educated persons that they neither need nor want to work even when there are opportunities, albeit not matching individual expectations, available. This phenomenon is referred to as "voluntary unemployment." It is compounded by the centralization of opportunities for waged employment in Male' and the unacceptability of the living conditions that obtain there. Voluntary unemployment is not only a drain on national resources, but also results in the non-productive, possibly inappropriate, use of individual talents and time. At the same time as young people opt out of the work force, another area of concern is the extreme paucity of employment opportunities for atoll women who are more likely to be bound to their home islands as compared to men. Economic dependence not only subordinates women's status but also is a root cause of repeat marriages among women and consequent frequent child bearing.

The Government has identified the development of in-country training capacity as a national priority. External assistance has been sought to further develop post-secondary education to produce skilled people in employment areas of high need. At present there are six local training institutions which provide long- and short-term technical, vocational and in-service training. These include the Institute of Hotel and Catering Services, the Maldives Institute of Technical Education, the Maldives Centre for Management and Administration, Non-formal Education Centre, Institute of Teacher Education, and Maritime Training Centre. The Government also provides scholarships for overseas tertiary education. The Ministry of Youth and Sports conducts vocational courses through its Youth Centres. The proposed National Youth Policy enunciates several strategies to improve the employment situation among young people. These include, among other things, establishing a Career Guidance and Vocational Counselling Centre, development of sectoral programmes aimed at increasing the employment prospects of young people in tourism, fisheries and agriculture, and establishing a youth business and entrepreneurship development programme.

Some programmes have also been executed in order to improve women's income earning capacity. Island Women's Committees in the atolls have been given principal funding to form women's cooperatives. The Southern Atoll Development Project and the Atoll Credit and Development and Banking Project operate two macro level loan schemes out of which approximately 25 per cent of the funds are utilized by women. The Ministry of Fisheries and Agriculture provides micro- and macro-level funding for enterprise development and women have been trained to enable them to access this funding. Loan and credit schemes are also offered by the Ministry of Women's Affairs and Social Security and the Development Banking Cell of the Bank of Maldives. Seven garment manufacturing centres were set up by the Ministry of Trade and Industries to attract women workers from neighbouring areas; however, a predominantly Sri Lankan workforce staffs most factories. Encouraging women's participation in the work force is of course not merely related to creating opportunities for work, but is fundamentally linked to issues such as women's control over their sexuality, which determines to a large extent the number of children they have and therefore the time they have available for productive work, as well as the provision of support services, for example those of child care, which would release women from their domestic work burden and enable them to engage in work.

It is expected that the development of growth centres in the different regions will ease the need for migration to Male' and also provide employment opportunities in a variety of sectors for all groups at locations closer to their home islands. Along with expanding, and adding value to existing employment options, new and appropriate avenues of work need to be explored. Information technology, which requires workers with basic education and training and a basic communications infrastructure, is one such avenue. International markets can be serviced from geographically dispersed locations, making it a particularly appropriate field that could potentially provide "respectable" work options at different levels for young Maldivians. While opportunities for employment should be increased and broadened, emphasis must also be placed on creating and promoting a "culture of work" which links engagement in an occupation not only with the ability to earn an income but also with self-respect and self-actualization. More needs to be done to encourage youth and women, especially those who live in secluded island communities, to think creatively and to give them access to information with which they can make a critical assessment of their current situation and strategic choices for their future. To the extent that women feel they have roles in life beyond those of maintaining the household and having children, they may have an incentive to engage in productive activities.

Managing the Environment and Natural Resources

Nurturing and protecting the environment are top priorities of the government. They are viewed as being fundamental to the continued physical existence and long-term human development of the country. The Government is pursuing a holistic approach to environment management. Environmental management is not seen as a separate or compartmentalized activity, but rather an issue to be addressed in all activities, whether social, infrastructure related or economic. A National Commission for Environment Protection was set up in 1984, and the Ministry for environment was established in 1993.

The Maldives is implementing Agenda 21 adopted by the Earth Summit and is party to all major international environment conventions. Initiatives aimed at encouraging environmental protection include the President's Environment Award Programme, the independent Clean Maldives Campaign and the Two Million Tree Programme. Environmental awareness is delivered through radio and television and has also been integrated into the education curriculum.

A second National Environmental Action Plan is being completed in the Fifth Plan period setting out the Government's environmental priorities, strategies and actions. A national objective and priority indicate the government's commitment to securing development on a sustainable basis. The four specific objectives to guide action in the Plan period and beyond are:

- to ensure that future planning is for sustainable development and that sound environmental assessment and management is an integral part of national, regional, and sector master planning exercises.
- to ensure that all existing development and activities are subject to sound environmental management regimes and practices
- to ensure effective environmental law, institutional arrangements and enforcement to develop and maintain a sustainable development regime

- to ensure that all new projects, including major public infrastructure and private development, are subject to effective environmental impact assessment procedures prior to approval.

In addition, provision of infrastructure to manage the impacts of human settlement on the reef and lagoon environments and groundwater resources is addressed with specific objectives and a range of associated measures. There are also policies emphasizing management of fisheries and tourism development on a sustainable basis. Land reclamation and other potential alterations to the ocean currents will be carefully assessed before being allowed to proceed. A balance of risks against needs will be undertaken as part of this assessment.

The long term future of the Maldives' tourism industry is closely linked to sustainable management of the environment qualities that make this country a unique tourism destination. Loss of the attributes, which make an island or atoll attractive to tourists, can spell economic disaster to the industry and those who depend on it. Efforts are being made to understand the impact of tourism on the environmental wealth of the country. Continued attention will need to be given to aspects such as siting and construction of resort architecture which is in sympathy with island character, protection of reefs while undertaking channel clearance, beach replenishment, liquid and solid waste disposal, groundwater contamination, as well as the environmental impact of diving and snorkeling activity which can damage sensitive hard corals.

Between 1982-93, total energy consumption in the Maldives grew at an annual average rate of 14 per cent. During this period, there has occurred a complete reversal in the importance of petroleum products and biomass fuels. In 1982, fuelwood consumption accounted for approximately 65 per cent of total primary energy. By 1993, this fell to 22 per cent. Annual imports of petroleum products increased dramatically from around 12,000 tonnes of oil to over 106,000 tonnes of oil equivalent. By 1993, petroleum products accounted for more than 75 per cent of total energy supplies. Major changes have also occurred in the demand for energy. In 1982, the residential sector accounted for some 65 per cent of total final energy demand. By 1993, due to the increased energy demand for transport, fisheries and tourism, the share of the residential sector fell to only 21 per cent of final demand.

At present, public electricity supplies are available to all islands with a population exceeding 2,000. Some 57 per cent of the population does not have access to continuous supplies of electricity. Power is generated by private or community-owned generators mostly in 3-5 kW range. This provides only few hours of electricity everyday.

To date, no energy agency has been directly responsible for energy planning or regulation in the country, and energy development has proceeded on an *ad hoc* basis. Given the recent rapid growth in demand for petroleum and electricity, both energy suppliers and consumers would obtain significant benefits from the development of a comprehensive plan for the energy sector and from an assessment of possibilities for introducing alternative sources of energy. Given the geographical characteristics of the country, it is virtually impossible to design an integrated energy system. In this situation, alternative sources of energy, wind power and photovoltaics, may present a technically feasible energy solution for many small islands. In

addition, given the diseconomies of scale in the provision of conventional energy, alternative sources of energy can be expected to bring energy cost levels in line with those of other developing countries.

Establishing Responsive Governance

A national objective in the Fifth Plan has been to establish a responsive and efficient system of governance that includes a streamlined and efficient public administration, an effective system of justice and adequate involvement of people in the setting of priorities, and in the implementation of development programmes. A particular emphasis has been placed on improved court administration, the strengthening of legal education and enhanced dispute resolution. Another major focus has been on increasing public sector accountability through the development, reporting and assessment of agency programmes.

The need for a comprehensive, legal framework to cover all aspects of a modern economic state is recognized. New complexities need to be addressed and integrated within a uniform, comprehensive, and transparent legal system. Legislation that supports and regulates, among other things, labour, consumer protection, private investment and the environment remains to be formalized. The Government and Attorney General's Office are responsible for this process. Where possible, laws enacted by other Islamic nations have been examined for their relevance to the Maldives and locally appropriate laws are being drafted. The process of modernizing existing acts and regulations is hampered by the fact that they exist in Dhivehi and are therefore only accessible to local lawmakers and drafters. Within this context, the recently enacted *Family Law* and the 1992 law on the *Protection of the Rights of Children*, constitute significant advances in protecting the rights of women and children.

Considerable efforts have been made to develop institutional arrangements consistent with the principle of good governance that are responsive to the special needs of a nation composed of geographically scattered and insular communities. Various representative committees have been established, including the Atoll Development Committees, the Island Development Committees and Women's Development Committees. However, the positive impacts of these institutional arrangements have been few due to the absence of well developed capacities at the local levels for the planning and management of the developmental process. Both the Government and the nation's development partners have placed an increasing emphasis on the importance of the decentralized planning and management of development activities. Successful examples include planning and management capacity building projects in some atolls, and the integrated development project in Nilandhe Atoll. The Government is in the process of establishing fully operational Development Cells in atoll administrations under the aegis of the Ministry of Atolls Administration.

While its slogan is "Islam and Dhivehi language - the foundation of our national identity," the Government of Maldives is conscious that the Maldivian identity is exposed to external cultural influences from several quarters including, the international media and information, the entry into the country of large numbers of expatriate workers and tourists, and ever increasing numbers of Maldivians travelling overseas for study, business or leisure.

The Government is conscious of the need to protect and nurture the country's unique cultural identity. The Government acknowledges that, to a large extent, the homogeneity of the culture, traditions and views of the people have led to stable government conducive to economic and human development. For instance, stability has been important to the growth of tourism. Many of the influences may be positive. At the same time it is likely that some have the potential of subverting or diluting the Maldives' cultural uniqueness. Deliberate efforts, for instance, have been made to almost completely separate tourists from the local population in order to retain the 'cultural purity' of its people. Tourists, though they may visit, may not spend a night on inhabited islands and islanders, unless they work there, hardly ever visit resorts. A negative outcome of this could be increased conservatism and reactionary responses to progressive change. Another outcome could be a gradual dilution of cultural identity as youngsters find sociocultural strictures restrictive. Or a language spoken by a couple of hundred thousand people may fail to hold up to languages, such as English or Japanese, that have greater international currency. English medium education is already valued more by parents and students who know that without English speaking skills a Maldivian child's prospects for education beyond Grade 7 narrow down significantly. The challenge before the Maldives is to nurture and promote the unique cultural heritage of its people while being alert to many western influences.

Human development in the Maldives ultimately depends upon how secure its people are, how well its environment is preserved and nurtured, how fast the aspirations of its young people are fulfilled, and how effectively the benefits of economic growth are translated into lasting investments that improve the quality of life. The geography and vulnerability of the Maldives, however, make these seemingly common approaches to human development quite complex and formidable. Accelerating human development in the Maldives is not a challenge just for the country, but for the entire global community that is obliged to protect and nurture the extraordinarily rich natural and environmental resources of this unique island nation.

This page is intentionally blank

Technical Note:
Computing the Human Development Index (HDI)

The Human Development Index (HDI) is based on three indicators: longevity, as measured by life expectancy at birth, educational attainment as measured by a combination of adult literacy (two-thirds weight) and the combined primary, secondary and tertiary enrolment ratio (one-third weight), and standard of living, as measured by real GDP per capita (PPP\$).

Fixed minimum and maximum values

To construct the Index, fixed minimum and maximum values have been established for each of these indicators:

Life expectancy at birth: 25 years and 85 years
 Adult literacy rate: 0% and 100%
 Combined gross enrolment ratio: 0% and 100%
 Real GDP per capita (PPP\$): \$100 and \$40,000 (PPP\$)

For any component of the HDI, individual indices can be computed according to the general formula:

$$\text{Index} = \frac{\text{Actual } x_i \text{ value} - \text{minimum } x_i \text{ value}}{\text{Maximum } x_i \text{ value} - \text{minimum } x_i \text{ value}}$$

According to the Human Development Report 2000, life expectancy at birth in the Maldives is 65 years. Therefore:

$$\text{Life expectancy Index} = \frac{65 - 25}{85 - 25} = \frac{37}{60} = 0.667$$

Similarly, the adult literacy rate for the Maldives is given as 96%.

$$\text{Adult literacy Index} = \frac{96 - 0}{100 - 0} = \frac{96}{100} = 0.960$$

The combined gross enrolment ratio for the Maldives is 75%.

$$\text{Combined enrolment Index} = \frac{75 - 0}{100 - 0} = \frac{75}{100} = 0.750$$

Therefore:

$$\text{The Educational Attainment Index} = (0.960) \times (2/3) + (0.750)/3 = 0.890$$

Treatment of income

Constructing the Income Index is a little more complex. Income enters the HDI as a surrogate for all dimensions of human development not reflected in a long and healthy life and in knowledge – in a nutshell, it is a proxy for a decent standard of living. The basic approach in the treatment of income has been driven by the fact that achieving a respectable level of human development does not require unlimited income. To reflect this, income has always been discounted in calculating the HDI.

In the construction of the HDI therefore, income is treated using the following formula:

$$W(y) = \frac{\log y - \log y_{min}}{\log y_{max} - \log y_{min}}$$

For Maldives, the real GDP per capita for 1998 has been estimated at PPP\$4,083. The Income Index is then calculated using the following formula:

$$W(y) = \frac{\log (4,083) - \log (100)}{\log (40,000) - \log (100)} = 0.619$$

The HDI for the Maldives then becomes:

$$\text{HDI} = (0.667 + 0.890 + 0.619)/3 = 0.725.$$

Table A.1: Human Development Index for the Maldives

	Life expectancy at birth (years)	Adult Literacy Rate (%)	Gross enrolment ratio (%)	Average per capita household income (PPP\$)	Life expectancy index	Education index	GDP index	Human Development Index HDI
	1997-98	1997-98	1997-98	1997-98				
Maldives	65	96	75	4,083	0.667	0.890	0.619	0.725

Source: Human Development Report 2000

HDI for Male and the Atolls

For the first time, the Vulnerability and Poverty Assessment (1998), a Report published jointly by the Ministry of Planning and the United Nations Development Programme, makes available disaggregated data for Male and the Atolls on key human development indicators. This enables us to construct the disaggregated HDI for Male and the Atolls. There are however some discrepancies between the survey data and the national statistics published by the Government.

Table A.2: Basic indicators of human development for Male and the Atolls

	Life Expectancy at birth (years)	Adult literacy rate (%)	Gross enrolment ratio (%)	Average per capita household income (Rufiyaas)
	1997-98	1997-98	1997-98	1997-98
Male	68	99	79	12,775
Atoll	60	97	80	7,300
Maldives	62	98	80	8,760

Source: Vulnerability and Poverty Assessment (1998)

The following adjustments have been made for the computation of disaggregated HDIs for Male and the Atolls.

Life expectancy at birth:

According to the Vulnerability and Poverty Assessment (VPA) Report, life expectancy at birth is 62 years – 68 years in Male and 60 years in the Atolls. Estimates of life expectancy at birth for the Maldives used by Government is 70 years. In using the official figure of 70 years for the Maldives, the estimates for Male and the Atolls have been derived by using the same differentials as observed in the VPA study. Thus,

Estimated life expectancy for Male: $(68/62) \times 70 = 77$ years
 Estimated life expectancy for the Atolls: $(60/62) \times 70 = 68$ years

Educational Attainment Index

Estimates for adult literacy and combined gross enrolment ratios are marginally higher than estimates used by the Human Development Report 2000. The higher estimates of the VPA have been used for the computation of the desegregated HDI.

Treatment of income

The World Bank has estimated real GDP per capita (PPP\$) for the Maldives for 1998 at PPP\$ 4,083. The VPA estimates that the average per capita household income in Male is Rf. 12,775 – 46% higher than the national average of Rf. 8,760. Similarly, the average household income in the Atolls is Rf.7,300 – 17% lower than the national average. These same proportions have been applied to obtain comparative estimates of real GDP per capita (PPP\$):

Estimated real GDP per capita for Male : 46% higher than PPP\$4,083 = PPP\$ 5,954.
 Estimated real GDP per capita for the Atolls: 17% lower than PPP\$ 4,083 = PPP\$ 3,403

The HDI values for Male and the Atolls have been computed by using the same formulas as described above. A summary statement of the HDI values is presented below.

Table A.3: Human Development Index for Male and the Atolls

	Life expectancy at birth (years)	Adult literacy rate (%)	Gross enrolment ratio (%)	Average per capita household income (PPP\$)	Life expectancy index	Education index	GDP index	Human Development Index HDI
	1997-98	1997-98	1997-98	1997-98				
Male	77	99	79	5,954	0.863	0.923	0.682	0.823
Atolls	68	97	80	3,403	0.712	0.913	0.589	0.738
Maldives	70	98	80	4,083	0.750	0.920	0.619	0.763

Source: Vulnerability and Poverty Assessment (1998) and Statistical Yearbook of the Maldives

Note that there is a discrepancy between the HDI value for the Maldives (0.763) calculated in Table A.3, and in the computations made by Human Development Report 2000 (0.725 in Table A.1). The main reason for this discrepancy is the difference in life expectancy estimates. HDR2000 uses a life expectancy at birth of 65 years whereas the Government uses a figure of 70 years. Again, marginal differences in the figures pertaining to educational attainment also contribute to the difference in HDI values.

This page is intentionally blank

REFERENCES

- Government of the Republic of Maldives (2000)
Education for All, Summary Report, Ministry of Education, Male:Republic of Maldives
- _____ (2000)
The Beijing Platform for Action: progress made in the critical areas of concern, Ministry of Women's Affairs and Social Security, Ministry of Finance and Treasury, Male:Republic of Maldives
- _____ (1999)
Atoll Development Project (funded by the Asian Development Bank) TA No. 2895-MLD, Ministry of Finance and Treasury, Male:Republic of Maldives
- _____ (1999)
Education For All, Ministry of Education, Male:Republic of Maldives
- _____ (1999)
Educational Statistics, Ministry of Education, Male:Republic of Maldives
- _____ (1999)
Health Report, Ministry of Health, Male:Republic of Maldives
- _____ (1999)
Maldives and Its Development Partners: An Agenda for Cooperation, The Sixth Round Table Meeting between Maldives and its Development Partners, Vol. 1 *Country Presentation*, Geneva.
- _____ (1999)
Maldives and Its Development Partners: An Agenda for Cooperation, The Sixth Round Table Meeting between Maldives and its Development Partners, Vol. 2 *Priority Project Profiles*, Geneva.
- _____ (1999)
Statistical Yearbook of Maldives, Ministry of Planning and National Development, Male:Republic of Maldives.
- _____ (1998)
Fifth National Development Plan 1997-2000, Vols. 1 & 2, Ministry of Planning, Human Resources and Environment, Male:Republic of Maldives.
- _____ (1998)
Vulnerability and Poverty Assessment, Ministry of Planning and National Development & UNDP, Male.
- _____ (1998)
Health Master Plan (1996-200), Ministry of Health, Male:Republic of Maldives
- Jenkins, C. (1999)
Situational Analysis of HIV/AIDS in the Maldives, mimeo.
- Pearson, L.W. & Cockcroft, A. (1999)
Reproductive Health Baseline Survey, Draft Final Report for CIET International, submitted to Ministry of Health, Republic of Maldives, and supported by UNFPA.
- Sen, A. (1999)
Development as Freedom, New Delhi:OUP.
- UNDP (2000)
Human Development Report 2000, New York:OUP.
- UNDP (2000)
20 Years of Women in Development in the Maldives 1977-1997 by Husna Razee (draft)

UNDP (1999)
1999 Annual Report of the UN Resident Coordinator in Maldives, Male.

UNDP (1999)
Pacific Human Development Report, Suva, Fiji.

UNDP (1994)
Pacific Human Development Report, Suva, Fiji.

UNDP & WTO (2000)
Social, Economic and Environmental Impacts of Tourism, Madrid.

UNDP & ESCAP (2000)
Social development in the Maldives: overview and assessment (Draft), Male.

UNICEF (1998)
Situational Analysis of Women and Children - 1998, Male:UNICEF.

List of Boxes

- 1.1 Human rights and human development
 - 1.2 Mortality estimates: Need to reconcile differences
 - 1.3 Islam does not prohibit effective family planning
 - 1.4 First steps: An innovative programme for early stimulation
 - 1.5 The 22-school project
 - 1.6 Socialized into womanhood
 - 1.7 Housing and population distribution
 - 1.8 The potential risk of HIV/AIDS
-
- 2.1 The Gyben Herzberg lens
 - 2.2 High cost of infrastructure
 - 2.3 Access to information
 - 2.4 Unequal access to infrastructure
 - 2.5 Legal, regulatory and judicial system
 - 2.6 The relationship among islands
-
- 3.1 Island Women's Committees
-
- 4.1 Planned development in the Maldives
 - 4.2 Decongesting Male

List of Tables

- 1.1 Life expectancy at birth in the Maldives
- 1.2 Immunization coverage in the Maldives
- 1.3 Contraception user rate by Atoll: 1996-98
- 1.4 Expansion of health facilities in the Maldives
- 1.5 Distribution of enrolment by type of school
- 1.6 Number of schools by level
- 1.7 Enrolment trends by level
- 1.8 Teachers by training serving at different levels in the Maldives
- 1.9 Local and expat teachers serving at different levels in the Maldives
- 1.10 Gross and net enrolment ratios in primary education
- 1.11 Males and females by level of educational attainment
- 1.12 Student enrolment in SEC and Maldives College of Higher Education Institutions
- 1.13 Males and Females who have completed higher education overseas: 1990-2000
- 1.14 Employment in different sectors
- 1.15 Marriages and divorces in Male and the Atolls
- 1.16 Drug abuse cases reported by age
- 1.17 Increase in health personnel in Male and the Atolls
- 1.18 HDI values for Male and the Atolls

- 2.1 Shortage of agricultural land

- 3.1 Composition of GDP
- 3.2 Share of GDP
- 3.3 Tourism sector: key indicators
- 3.4 Fisheries sector: key indicators
- 3.5 Exports and imports as % of GDP
- 3.6 Aid disbursement by type of assistance
- 3.7 Composition of social sector spending
- 3.8 Women in senior government positions

List of Figures

- 1.1 HDI for South Asian countries: 1998
- 1.2 Age distribution of the population: 2000
- 1.3 Child birth and infant deaths in the Maldives: 1987-98
- 1.4 Number of births and deaths in the Maldives
- 1.5 Increase in health personnel: 1989-98
- 1.6 Percent of children under 5 years with undernutrition
- 1.7 HDI for Male and the Atolls

- 3.1 Growth rate of GDP
- 3.2 Trends in consumer price index
- 3.3 Total fish catch in the Maldives: 1992-98
- 3.4 Breakdown of government revenues
- 3.5 Share of social sector expenditure