

POLICY AND MEASURES

6

The chapters on mitigation and adaptation discussed the actions and measures that can be taken to begin to deal with the implications of climate change on the Maldives. The Government, public and the private sector, as a whole needs to acknowledge the reality of climate change and associated sea level rise. The Maldives, being one of the countries most vulnerable to climate change, needs to incorporate effects of climate change in national development plans. New policies need to be developed and existing policies need to be strengthened.

The rest of this Chapter focuses on identifying policies required to address the actions and measures identified in the earlier chapters.

6.1 Current environmental policies

In addition to local environmental concerns, the Government has continued to work in the wider international context because of the potential threats posed by externally generated problems and the collective responsibility for sustainable development at the global level. The Second National Environment Action Plan (NEAP II) emphasises climate change and associated sea level rise as a primary concern of the Maldives. Thus, the Maldives has continued to participate in international fora, calling attention to the fragile nature and special vulnerability of small islands.

Current national environmental policies are based on the need to take an integrated approach to environmental management and to work towards the goal of sustainable development. This is reflected in the NEAP II, which is the main guiding document for developing national environmental policies.

The NEAP-II has set its strategies and priorities with the aim to “protect and preserve the environment of the Maldives, and to sustainably manage its resources for the collective benefit and the enjoyment of the present and future generations.”

The NEAP-II further indicates the need for strengthening the environmental law, environmental administration, education and public aware-

“The economic, technical and technological resources are available collectively. It is not too late to save the world. It is not too late to save the Maldives and other low-lying island nations. Only the vital collective commitment is missing.”

*Maumoon Abdul Gayoom,
President of the Republic Maldives,
in his speech “Death of a nation –
What can be done?”
at the Commonwealth Heads of
Government Meeting, 15 October
1997, Vancouver.*

ness, science and research, and the human resource capacity of the country. The issues identified as priorities are:

- *climate change and sea level rise;*
- *coastal zone management;*
- *biological diversity conservation;*
- *integrated reef resources management;*
- *integrated water resources management;*
- *management of solid wastes and sewage;*
- *pollution control and managing hazardous waste;*
- *sustainable tourism development;*
- *land resources management and sustainable agriculture; and*
- *human settlements and urbanisation.*

Apart from the policies and measures outlined in the NEAP II, the importance of sound practices for environmental and natural resources management is stressed in various parts of the fifth National Development Plan (NDP-5). The NEAP II and the NDP-5 have been developed with the view to maximise the sustainable use of natural resources, while paying due attention to the constraint that the island communities are small and widely dispersed over the country.

6.2 Recommended policy measures

This section builds on the recommendations from previous chapters to identify ways of strengthening the present national development policies and developing new policies or regulations, taking into account the effects of climate change and associated sea level rise.

The main policy elements can be identified as follows:

1. Participate in international advocacy;
2. Reflect climate change concerns in regulatory processes;
3. Create sustainable financing mechanisms for programmes related to climate change activities;
4. Build, strengthen and enhance national capacity to adapt to climate change;

5. Incorporate adaptive measures to climate change into national development planning; and
6. Develop appropriate measures to mitigate greenhouse gas emissions

A National Implementation Strategy had been developed to accommodate the main policy elements into our national planning. Through such policies, the Maldives should aim to benefit from the arrangements, such as the Global Environment Facility, activities implemented jointly under the Convention, and the Clean Development Mechanism under the Kyoto Protocol, resulting from the international climate change negotiations. Detailed objectives and actions for the above policy elements are included below.

NATIONAL IMPLEMENTATION STRATEGY FOR ADDRESSING CLIMATE CHANGE – POLICY MATRIX

1. Participating in international advocacy

Strategy/Objective	Actions/Programmes/Activities	Resources	Lead Agency	Time Frame
Voicing the nation's concern internationally	<ul style="list-style-type: none"> Ensure continued active participation in regional and international climate change related activities 	Finance	MHAHE	Immediate
	<ul style="list-style-type: none"> Strengthen participation in portraying a collective voice for all small island states at international forum 	Finance	MHAHE	Immediate
	<ul style="list-style-type: none"> Strengthen negotiation skills for participating team members 	Finance	MHAHE	Immediate
	<ul style="list-style-type: none"> Dissemination of outputs and decisions of regional and international climate change forum to all foreign missions and local stakeholders 		MHAHE	Immediate

2. Reflect climate change concerns in regulatory processes

Strategy/Objective	Actions/Programmes/Activities	Resources	Lead Agency	Time Frame
Strengthen and developing laws and regulations as appropriate	<ul style="list-style-type: none"> Incorporate climate change implications into present environment impact assessment processes 	-	MHAHE	Immediate
	<ul style="list-style-type: none"> Integrate climate change related policies/issues in the national audit of government organizations 	-	MHAHE	Immediate
	<ul style="list-style-type: none"> Establish a National Energy Agency responsible to formulate and review policies on energy resources management and establish an effective regulatory framework, to encourage innovation and response to energy issues and needs in a timely manner. 	Human resources Technical assistance Finance	Presidents Office	Immediate

3. Create sustainable financing mechanisms for programmes related to climate change activities

Strategy/Objective	Actions/Programmes/Activities	Resources	Lead Agency	Time Frame
Facilitate effective access to external funding	<ul style="list-style-type: none"> Seek financial and technical assistance from related bilateral and multilateral sources 	-	MHAHE, MOFT, DER, MPND	Immediate
	<ul style="list-style-type: none"> Create trust funds to facilitate climate change related activities 	-	MOFT	Short term
Generating internal funding	<ul style="list-style-type: none"> Allocate explicitly for climate change related programmes from the annual budget of related government agencies and ensure these funds are utilised fully for the purpose 	-	MOFT, DER, MPND	Immediate

4. Building national capacity to adapt to climate change

Strategy/Objective	Actions/Programmes/Activities	Resources	Lead Agency	Time Frame
Human resources development	<ul style="list-style-type: none"> Short and long term higher education and professional training in the field of coastal zone management 	Finance	MHREL MHAHE	Immediate
	<ul style="list-style-type: none"> Integrate climate change and other environment issues into present island chief training programme 	Finance	MOAA	Immediate
	<ul style="list-style-type: none"> Continue ongoing in-country Coastal Zone Management training programme 	Finance	MHAHE	Immediate
	<ul style="list-style-type: none"> University level training in climatology, oceanography, coastal engineering, hydrology, water resources, cartography, tropical marine biology, physical geography, environmental science and other related fields 	Finance	MHAHE MHREL	Immediate
	<ul style="list-style-type: none"> Develop national capacity for emergency disaster relief, establish national coordination mechanism, develop national disaster management plan and an appropriate national response strategy 	Finance	MHAHE	Immediate
	<ul style="list-style-type: none"> Training in data collection, information management and analysis to support V&A process 	Finance	MHAHE, DM, MRC	Immediate
	<ul style="list-style-type: none"> Sustain the national climate change team in the preparation of subsequent national communication 	Finance	MHAHE	Immediate
Institutional Strengthening	<ul style="list-style-type: none"> Dedicate staff to carry out climate change related work within the Environment Section and the Environment Research Centre of the Ministry of Home Affairs, Housing and Environment 	Finance Human Resource	MHAHE	Immediate
	<ul style="list-style-type: none"> Improve coordination among stakeholders 	-	MHAHE	Immediate
	<ul style="list-style-type: none"> Appoint environmental focal points in all relevant institutions both in government and the private sector 	-	MHAHE	Immediate
	<ul style="list-style-type: none"> Facilitate effective information and resource sharing among stakeholders 	Finance Human Resource	MHAHE MCST	Immediate
	<ul style="list-style-type: none"> Introduce effective mechanisms and procedures for data collection, management, analysis and reporting process 	Finance Human Resource	MCST Individual agencies	Short term
	<ul style="list-style-type: none"> Establish standard procedures for data collection and management in all concerned agencies in order to provide easy access to required information 	-	MCST All concerned agencies	Short term
	<ul style="list-style-type: none"> Ensure continuous assessment of vulnerability to climate change by integrating into mandates of relevant government agencies 	-	President's Office	Short term
	<ul style="list-style-type: none"> Enhance data collection and monitoring capacity through acquisition and upgrading of climatological, surveying, mapping, hydrological and GIS equipment and software 	Finance Human Resource	MHAHE Respective agencies	Short term

Research and monitoring	<ul style="list-style-type: none"> Enhance capability, coordination and collaborative research among existing research institutions 	Finance Human Resource	ERC	Short term
	<ul style="list-style-type: none"> Establish links and initiate collaborative research with overseas research institutions 	Finance Human resource	MCST ERC MRC	Short term
	<ul style="list-style-type: none"> Expand and strengthen the current coverage of climatic, hydrological, coastal and coral reef monitoring in the country 	Finance Human Resource	DM ERC MRC	Short term
	<ul style="list-style-type: none"> Initiate monitoring of solar radiation, water chemistry and oceanographic parameters 	Finance Human Resource	DM	Immediate
	<ul style="list-style-type: none"> Initiate the research of the impact of climate change on fisheries and human health 	Finance Human Resource	MOH MOFAMR	Immediate
	<ul style="list-style-type: none"> Development of climate impact models 	Finance Human Resource	ERC	Immediate
Public Awareness	<ul style="list-style-type: none"> Development of public awareness campaigns on climate change 	Finance Human Resource	MHAHE	Immediate
	<ul style="list-style-type: none"> Conduct climate change awareness workshops targeted to policy makers, media, educators and the public 	Finance Human Resource	ERC	Immediate
	<ul style="list-style-type: none"> Review education curricula to include climate change and related environment education for the national education system 	Finance Human Resource	MOE	Immediate

5. Incorporate adaptive measures to climate change into national development planning

Strategy/Objective	Actions/Programmes/Activities	Resources	Lead Agency	Time Frame
Marine Ecosystem	<ul style="list-style-type: none"> Evaluate the adaptability of marine ecosystems to climate change 	Finance Human Resource	MRC	Short term
	<ul style="list-style-type: none"> Develop mechanisms for coordination and cooperation amongst all stakeholders in developing strategies concerned with coral reef management 	Finance Human Resource	MRC	Immediate
Coastal zone management	<ul style="list-style-type: none"> Development of feasible engineering solution for coastal protection 	Finance Human Resource	MCPW ERC	Short term
	<ul style="list-style-type: none"> Provide incentives to promote the use of imported construction materials to reduce the use of coral in construction 	Finance	MHUDB Ministry of Trade	Short term
	<ul style="list-style-type: none"> Work towards the goal of complete ban on coral mining 	-	MOFAMR	Short term
Land use management	<ul style="list-style-type: none"> Develop guidelines for land reclamation projects taking into consideration climate change and associated sea level rise 	-	MHAHE MPND	Immediate
	<ul style="list-style-type: none"> Continue ongoing population consolidation programmes to reduce the number of inhabited islands for cost effective coastal protection and development 	Finance	MPND	Immediate
	<ul style="list-style-type: none"> Produce and maintain land use maps and detailed maps of coastal areas to assist in planning of coastal zone development and management 	Finance Human Resource	MPND MHUDB ERC	Immediate
Infrastructure protection	<ul style="list-style-type: none"> Incorporation of engineered coastal protection solutions in future development of the International Airport 	Finance Human Resource	MPND MTCA	Medium
	<ul style="list-style-type: none"> Extension of the current insurance policies to cover all equipment and infrastructure of the International Airport for climate related incidents 	Finance	MOFT MTCA	Immediate
	<ul style="list-style-type: none"> Promote insurance of resort investments to adequately cover by insurance policies for natural disasters and episodic events 	Finance Human Resource	MoT MATI	Immediate
	<ul style="list-style-type: none"> Advocate for measures to safeguard properties from climate change impacts 	Finance	MHUDB	Immediate

Economic activities	<ul style="list-style-type: none"> Identify feasible economic activities for diversification in order to reduce dependency on tourism 	Finance Human Resource	MPND MOFT	Immediate
	<ul style="list-style-type: none"> Expansion of current fisheries industry 	Finance Human Resource	MOFAMR	Immediate
	<ul style="list-style-type: none"> Product diversification in the tourism sector to reduce dependency on marine environment 	Finance Human Resource	MoT	Short term
Food security	<ul style="list-style-type: none"> Promote local food production through sustainable agriculture practices and fisheries 	Finance Human Resource	MOFAMR	Immediate
	<ul style="list-style-type: none"> Introduce new technologies for food production 	Finance Human Resource	MOFAMR	Immediate
	<ul style="list-style-type: none"> Diversify sources for importing food products 	-	MOTI	Immediate
	<ul style="list-style-type: none"> Develop and maintain emergency relief measures 	Finance	NSS	Short term
	<ul style="list-style-type: none"> Strengthen food distribution and enhance capacity of food storage throughout the country 	Finance Human Resource	Ministry of Trade MPND	Short term
	<ul style="list-style-type: none"> Upgrading of domestic airports as backups for continued international links 	Finance Human Resource	MPND MTCA	Long term
Water Resource Management	<ul style="list-style-type: none"> Develop a water resource management strategy taking into consideration the impact of climate change and sea level rise on the precipitation patterns and groundwater salinity 	Finance Human Resource	MWSA	Immediate
	<ul style="list-style-type: none"> Protect the available groundwater resources by strengthening guidelines for development of sewerage, wastewater management systems, handling of hazardous waste and solid waste disposal methods 	Finance Human Resource	MWSA	Immediate
	<ul style="list-style-type: none"> Introduce alternate distillation and desalination technologies as a water resource for the high density populated islands to reduce dependency on fossil fuel desalination technologies 	Finance Human Resource	MWSA	Short term
	<ul style="list-style-type: none"> Develop effective storm water management mechanisms 	Finance Human Resource	MHUDB	Immediate
Energy	<ul style="list-style-type: none"> Ensure decision makers have most current and comprehensive information on the adequacy and reliability of energy resources available to meet the Maldives long-term consumer demand 	Finance	MCST Energy Agency	Short term
Waste Management	<ul style="list-style-type: none"> Consider greenhouse gas emissions when developing national solid waste management strategy 	Finance Human Resource	MHAHE	Immediate
Human health	<ul style="list-style-type: none"> Identify climate change implications on human health and incorporate such implications into health master plans 	Finance Human Resource Technical	MOH	Short term
Natural disaster	<ul style="list-style-type: none"> Establish a contingency plan for effective mechanisms for disaster reduction 	Finance	MHAHE	Immediate

6. Develop appropriate measures to mitigate the greenhouse gas emissions

Strategy/Objective	Actions/Programmes/Activities	Resources	Lead Agency	Time Frame
Demand side management	<ul style="list-style-type: none"> Promote energy efficiency and conservation through standards, regulations, pricing policies and public awareness 	Human Resources Finance	Energy Agency	Short term
	<ul style="list-style-type: none"> Enhance the use of energy efficient technologies and efficiency of the present technologies 	Human Resources Finance	Energy Agency MCST	Immediate
	<ul style="list-style-type: none"> Promote environment friendly technologies for household, industrial and business appliances 	Finance	Energy Agency MCST	Immediate
	<ul style="list-style-type: none"> Promote the use of environment friendly modes of transport and public transport 	-	Energy Agency MTCA	Immediate
	<ul style="list-style-type: none"> Introduce sustainable public transportation systems for land and sea transport, to minimize the use of fossil fuels 	Finance	Energy Agency MTCA	Medium term
Supply side management	<ul style="list-style-type: none"> Convert conventional sources of energy to more environment friendly sources, in transportation and electricity generation 	Finance Human Resources	Energy Agency MCST	Medium
	<ul style="list-style-type: none"> Introduce more efficient technologies in energy production 	Finance Human Resources	Energy Agency	Short term
	<ul style="list-style-type: none"> Introduce hybrid energy systems 	Finance Human Resources	Energy Agency	Medium term
	<ul style="list-style-type: none"> Introduce renewable sources for energy and electricity generation 	Finance Human Resources	Energy Agency MCST	Long term
Sink enhancement	<ul style="list-style-type: none"> Strengthen measures of increasing vegetation cover 	Finance	MOFAMR	Immediate
	<ul style="list-style-type: none"> Acknowledge coral reefs as carbon dioxide sinks and strengthen present coral reef protection measures for its healthy growth 	Finance Human Resources	MRC	Immediate