CHAPTER - VI

National Policy And Programmes
Introduction

A state is fundamentally expected to protect the security and promote the welfare of its citizens. In return, the state and state sovereignty are given primacy as the ordering unit and organising principle of world affairs. A state’s capacity to fulfil this double purpose is fully dependent on the institutional structure it has for running its government. Since Maldives is environmentally extremely fragile, it has some specialised institutions and policy frameworks to protect itself from environmental damage. This chapter deals with the government’s institutional structure in implementing national policies, strategies, projects and programmes for effective environmental management, economic development and national security. The effectiveness of these policies and projects is discussed in detail inasmuch as they actually benefit the people in achieving the targets and overcoming the challenges to security. Emphasis has been given to guidelines and policies for promoting sustainable tourism, the government’s response to the tsunami disaster, and the projects undertaken in view of the imminent threat of rising sea level.

Since the Maldives’ economic development is predominantly dependent on only two sectors – tourism and fishing, which in turn totally rely upon the well-being of the country’s environment – there is not much space left for it in terms of promoting investments and production policy initiatives in other sectors like heavy industries. This chapter mainly deals with the policy initiatives taken towards securing the environment and the tourism and fishery sectors for its economic development. It has to be reiterated here that environmental protection and economic development are closely intertwined in the case of Maldives. Accordingly, this chapter will look at some length into the protection of environment and safeguarding resources.

INSTITUTIONAL STRUCTURE

The key authorities involved in the protection of the environment are the National Commission for the Protection of the Environment, the Ministry of Planning, Human Resources and Environment, the Ministry of Fisheries and Agriculture, the
Ministry of Tourism, the Ministry of Construction and Public Works, and the Ministry of Atolls Administration.

The environment sector was formally recognised as an entity within the government in 1984, with the creation of an Environmental Affairs Division in the Ministry of Home Affairs and Social Services. In 1988, a full-fledged ministry was established to deal with environmental matters. In October 1989, a national workshop was organised to take note of all the recommendations contained in available reports and expert studies and laid down the directive principles and framework for action. The National Environment Action Plan (NEAP) identifies specific areas for the assessment of status and areas of immediate priority. Environment was given an elevated status, being combined with the Ministry of Planning and Development to form a new Ministry of Planning and Environment. The rationale for this move is that environmental considerations needed to be efficiently integrated into development planning. In the government reorganisation of 1993, the Ministry was given the additional responsibility of human resource development, and was renamed the Ministry of Planning, Human Resources and Environment (MPHRE) (UNDP - Country Report, 2005: 19).

In 2004, the ministry was reorganised as the Ministry of Environment, Energy and Water, thus reflecting the government’s commitment to an integrated approach towards the preservation of resources and sustainable development. The ministry is responsible for developing all aspects of environmental policy and enforcement of the Environmental Protection and Preservation Act, 1993. It also acts as the secretariat for the National Commission for the Protection of the Environment. The Environment Section within this ministry deals with all issues of the environment, including global environmental issues. It administers and coordinates with other government offices, advises on environmental aspects, and undertakes programmes to raise public awareness on environmental issues. It also acts as the focal point for both national and international activities. The Environment Research Unit of the ministry is charged with assembling the necessary environmental information required for planning and management (Ministry of Environment, 2006).
The National Commission for the Protection of the Environment (NCPE), which was appointed by the President in 1989, acts as an independent advisory body to the ministry. The Minister of Environment is its president. Composed of senior officials from all government departments as well as private sector representatives, the NCPE advises the Environment Minister on matters dealing with environmental protection, sustainable resource utilisation and conservation of biodiversity. The mandate of the NCPE includes: involvement in assessment, planning and implementation of activities of the Maldives that affect the environment, activities to protect the environment, advising on tackling environmental problems, and ensuring that the environmental protection component is included in development projects (UNDP - Country Report, 2005: 19).

The Legal provisions

The institutional structures are of little use if they are not backed by strong legal provisions in safeguarding the environment. Accordingly, at the national level, two main laws were formulated to provide a framework to guide the sustainable use, management and conservation of the country’s natural resources:

- the Fisheries Law (1970)
- the Environmental Protection and Preservation Act (1993)

In addition, NEAP was prepared in 1989 with the purpose of assisting the government to: (a) maintain and improve the country’s environment, including the marine and ocean area contained within its Exclusive Economic Zone (EEZ); and (b) manage the resources contained therein for the collective benefit of present and future generations. NEAP identified several high-priority issues for urgent attention (Ministry of Environment, 2004). A number of actions are now being undertaken to address these issues and improve living standards in general, including a range of conservation measures to help recharge the severely depleted aquifer in Malé.
The Fisheries Law

The approval of the Fisheries Law by the Citizens’ Majlis (National Assembly) in 1970 was an important step towards establishing a legal framework for environmental protection at the national level. Under the Fisheries Law, regulations exist to protect marine resources, including turtles, whales, dolphins and certain fish varieties. The Fisheries Law was subsequently reformulated during the mid-1980s with enhanced provisions for the conservation of living marine resources. The tenth clause of the Fisheries Law states:

In the event of a special need for the conservation of any species of the living marine resources, the Ministry of Fisheries shall have the right to prohibit, for a specified period, the fishing, capturing or the taking of such species or the right to establish special sanctuaries from where such species may not be fished, captured or taken. (Ministry of Justice, 2006)

Consequently, the government of Maldives had declared some species as endangered and also prohibited the export and capture of those species. In addition, to safeguard its marine life, any import of new species has to undergo a strict medical check-up as instructed by the government and its specialised institutions.

The Environmental Protection and Preservation Act

This act was approved by the Citizens’ Majlis in April 1993. This law was important in bestowing the erstwhile MPHRE with a wide range of statutory powers in the area of environmental regulation and enforcement. For instance, it empowered the MPHRE to draft guidelines for environmental protection and gave it responsibility for the identification and designation of protected areas and natural reserves. As a means to enforce environmental regulations, this Act further empowered the Ministry of Environment to levy fines of up to 100 million Maldivian Rufiya (US$10 million) in cases of breaches of the law (State of the Environment Report, 2004).

The Environmental Protection and Preservation Act (4/93) established a framework upon which regulations and policies can be developed to protect and preserve the natural environment and resources for the benefit of the future
generations (Ministry of Environment, 2004). In brief, the Act consists of the following provisions:

- Concerned government authorities shall provide necessary guidelines and advice, including imposing of fines and compensation for environmental damage that may take place.
- MPHRE is responsible for formulating policies as well as rules and regulations.
- MPHRE shall identify and designate protected areas and nature reserves.
- Mandatory Environmental Impact Assessment (EIA) for any new projects.
- Power to terminate developments causing significantly detrimental environmental impacts.
- Disposal of waste, oil and poisonous substances shall be regulated.
- Disposal and trans-boundary movements of hazardous wastes banned.

(Ministry of Justice, 2006)

These provisions made MPHRE the nodal agency and empowered the ministry to make specific rules and regulations. The Act also gave powers to MPHRE to take punitive actions on any kind of violations under the Environmental Protection and Preservation Act.

Conservation and Protection in Practice

The concept of in-situ\(^1\) conservation has been there in Maldives for less than two decades now. Marine Protected Areas (MPA) were demarcated for the first time in 1995. Although uninhabited islands and their reefs have been protected, protection has tended to result from limited resource extraction, as opposed to any concerted efforts at protection. Ex-situ\(^2\) conservation methods do not exist. For instance, there are no laboratories, aquariums, zoological or botanical gardens, or sacred gardens (land protected for religious uses) (Ministry of Marine Resources, 2006).

\(^1\)“On-site conservation” is the process of protecting an endangered plant or animal specie in its natural habitat, either by protecting or cleaning up the habitat itself, or by defending the specie from predators.

\(^2\)“Off-site conservation” means the process of protecting an endangered plant or animal specie by placing it in a new location, which may be a wild area or within the care of humans.
The main types of in-situ conservation methods employed in the Maldives include:

- MPAs;
- uninhabited islands;
- resort islands (only 20 per cent of land should be used and the remaining 80 per cent left as wilderness); and
- agricultural islands, where wilderness areas have been demarcated.

Some research and management programmes aimed at strengthening the future management of biodiversity are currently being implemented. These include:

- Integrated Coastal Zone Management and Land Use Plan;
- Assessment of Marine Biodiversity;
- Protection of Marine Ecosystems along the Maldives Coast for Sustainable Development, supported by Global Environment Facility (GEF); and
- Initiation of Protected Areas System (ibid.).

**Marine Protected Areas**

One of the important developments with regard to conservation practice in Maldives have been the designation of Fourteen MPAs in the central atolls, covering an area of approximately 12.55 sq km. These areas have an outstanding diversity of corals, reef fish and sharks, as well as other organisms ranging from sponges and molluscs to bivalves. All extractive and human activities, including coral and sand mining, fishing, collecting, netting and anchoring are banned in the MPAs, with the exception of bait fishing. Bait fishing is permitted given its importance for local tuna fishing; however, the methods used for bait fishing in MPAs must not damage or harm any living organism (Ministry of Marine Resources, 2006).

The government is currently examining options to extend MPA status to cover other parts of the archipelago. In addition, opportunities to establish terrestrial protected areas are being considered and some national parks may be designated in the near future. A number of potential sites have already been identified, including islands, wetlands, natural heritage sites and other habitats of significant importance.
Some of these sites have diverse bird populations, while others are uninhabited islands that serve as rookeries for sea turtles.

**Environmental Impact Assessment**

The EIA system was established through the Environmental Protection and Preservation Act, which came into effect in April 1993. The legislation provides the basic framework for the EIA process in the country and the EIA procedures are laid out in the form of guidelines. According to article 5(a) of the Act, an EIA study shall be submitted to the Ministry of Environment before implementing any activity that may have an impact on the environment. Article 5(b) states that the principles of EIA and the projects that require an EIA shall be determined by the Ministry. The guidelines outlining the procedures for EIA were approved by the Cabinet in December 1994 (Ministry of Planning and National Development, 2005). There are various licensing agencies authorised to issue an official permit to the action proponent to implement the proposed action. The main licensing agencies in the country are: Ministry of Trade and Industries, Ministry of Fisheries and Agriculture, Ministry of Tourism, and Ministry of Atolls Administration.

**National Environment Action Plan (NEAP)**

The NEAP was developed after taking into consideration the national strengths and weaknesses and recommendations of all expert missions and the reports of a national workshop organised for the purpose. The plan lays down the directive principles and a framework for action (SAARC–CCNDPPE 17, 1992: 191). It identifies specific areas for the assessment of the environmental status and areas of immediate priority. These priorities are fixed with national consensus.

The First NEAP (NEAP I) was developed in 1989 through a national workshop to address the planning and management needs of the country, covering a period of ten years. NEAP I contains the government’s overall strategy in the environment sector, which represents a combined approach to managing and solving existing problems and establishing the mechanisms and procedures for future sound
management of the environment. The principal aim of NEAP I is “to help the Government of Maldives to maintain and improve the environment of the country, including the marine and ocean area contained within the Exclusive Economic Zone, and to manage the resources for sustainable utilization”. NEAP is used in a six-yearly cycle to ensure environmental protection and sustainable development in the country. This complements the National Development Plan (NDP), which is a policy framework for the development issues for five-year periods (UNEP-RRCAP, State of the Environment Report, 2002: 23).

The Second NEAP (NEAP II) of 1999 emphasises climate change and associated sea-level rise as a primary concern of the Maldives. NEAP II is the main guiding document for developing national environmental policies. It 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”. NEAP II further indicates the need for strengthening the environmental law, environmental administration, education and public awareness, science and research, and the human resource capacity of the country.

The issues identified as priorities were:

- 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 (UNEP 2004).

The importance of sound practices for environmental and natural resources management is also stressed in various parts of the Sixth National Development Plan 2001-2005 (NDP-6). The NEAP II and the NDP-6 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.

NATIONAL PROGRAMME INITIATIVES ON THE PROTECTION OF THE ENVIRONMENT

A number of initiatives have been undertaken by the government of Maldives with the specific aim of encouraging environmental awareness and education. Most of these include and give importance to community-level participation and the involvement of school students in the execution of certain projects. Some of the awareness programmes with community participation were:

• Wall posters, television and radio programmes are used to disseminate information on specific issues of concern. These programmes attempt to inform the public on the state of the environment within and outside the country, including the impacts of human activities (Dhivehi Observer, March 2005).

• The World Clean-up Day Programme, the Clean Maldives and the Independent Maldives campaigns were designed to involve people in the cleaning up of litter. Community members are also given training in coastal zone management and in hazardous waste removal and disposal.

• “Thimmaveshi” (me and my surroundings) programme was introduced in 1987, to create environmental awareness in schoolchildren. With the involvement of environmental clubs, regular environmental programmes are conducted by prominent schools, where the students visit different islands to personally know about various methods and functioning of environmental protection and preservation (Maldives News Bulletin, 17 April 2000: 9).
• The severe storms that swept the country in 1991 caused severe damage to more than 3000 dwellings and uprooted or damaged more than 190,000 trees throughout the nation. In the light of this experience, a large-scale tree planting programme (the "Two Million Tree" Programme) was launched in 1996 with the strong involvement of schools, in an effort to conserve the biological diversity of trees used for timber. This programme seeks to replenish and expand good timber stock through the promotion of a number of tree species of timber and food value. Tree planting programmes were organised in schools every year on the World Environment Day of 5 June (Ministry of Environment, 2006).

• An Environmental Award would be presented by the President on Environment Day each year. The award is given to those who have made an outstanding contribution in the areas of protecting the environment, protecting the reefs and the marine ecosystem, safe disposal of waste, importing environment-friendly goods, and those working to create greater environmental awareness among the community such as schools, NGOs, private enterprises and individual people (Maldives News Bulletin, 27 March 2004: 3).

• Development of national sustainable development policy statement, which includes the NEAP in a six-year cycle and the NDP in a five-year cycle to ensure environmental protection and sustainable development (Ministry of Environment, 2006).

• The first NGO started in Maldives was an environmental NGO, “Bluepeace”, in 1989. It coordinates the overall programmes like Environment Day, community participation, issuing leaflets and a number of environmental awareness programmes (Minivan News).

However in the present context of global warming, more awareness programmes need to be conducted specifically to impart knowledge among the public on climate change issues and safety programmes regarding sea level rise. This would include issuing basic information and the likely impacts of climate change and sea
level rise on Maldives, emphasising on what should be done at the community level to reduce these impacts and how to deal with the expected changes.

The government is also actively involved with the international community for securing its environment by organising and participating in various conferences and conventions. These include:


• Hosting of the Small States Conference on Sea Level Rise in Malé in November 1989. The outcome of the conference was the Malé Declaration on Global Warming and Sea Level Rise, which paved the way for the establishment of an Action Group among small island states, to coordinate a joint approach on the issues of climate change, global warming and sea-level rise, and to pursue and follow up on global and regional response strategies. This Action Group later transformed into the Alliance of Small Island States (AOSIS) at the Second World Climate Conference (AOSIS, 2004).

• Hosting of the thirteenth session of the IPCC in the Maldives in September 1997.

• The GEF Climate Enabling Activity hosted a policy workshop on climate change on 15 March 2001. The workshop, in which 27 participants from 22 government offices took part, targeted at policymakers from various government sectors (GEF, 2006).

Climate Change and Environmental Policies

Among the worst possible effects of climate change, it is predicted that the Maldives will be inundated within the end of this century. To mitigate or at least to postpone this threat, the government has embarked on several programmes where it has started to formulate policies in an integrated approach, which includes preservation of marine and water resources, security of the livelihood of the people and putting in place a sustainable development.
The government is encouraging afforestation to prevent beach erosion and is backing a plan to clean litter and debris from the country’s coral reefs, which are a natural barrier against tidal surges, which place the fragile eco-system in peril. Environmental science is taught in every school, and given the same importance as writing and arithmetic. All new resorts are subject to a rigorous environmental impact study and developers are allowed to build on only 20 per cent of the islands. But the efforts are aimed at mitigation rather than prevention.

The ecological formation of Maldives makes resource management extremely difficult. Further, as inhabited coral islands are relatively few globally, literature on the subject is also limited. Undertaking in-depth technical studies to determine the carrying capacity and impact of construction and development is extremely costly and difficult due to absence of site-specific historical data (UNDP, 2006). Meanwhile, the government has taken a precautionary approach to island development. For example, tourism development is currently confined to certain atolls and its expansion is limited to selected islands. As per guidelines, for each island developed into a resort, one island must be left as a reserve. In 1996, only 74 of the country's 1192 islands were developed as resorts. Although there has not been a "cap" on island resort development, islands developed for resorts during the past 10 years have not exceeded 10 per cent of the country's total islands. This stable trend may not last long, it is expected that within 20 years, resort islands will grow to about 20 per cent of the total islands (Ministry of Planning and National Development, 2004).

Managing the Tourism Sector

Given the relationship between tourism and marine wildlife resources, the Ministry of Tourism clearly have an interest in ensuring that the country's marine resources are maintained in their pristine form. Nowadays, as compared to the unchecked and unplanned expansion and development of tourism in the 1970s, tourism is a carefully monitored and regulated industry. As such, the Ministry of Tourism also plays an important role in biodiversity management. For instance, it seeks to ensure that protected areas are monitored by its tour operators, scuba divers and instructors. The Ministry of Tourism, together with other ministries, has
undertaken initiatives to address the environmental issues affecting and related to tourism. These can be largely grouped into initiatives and legislation that address: Resort Development; Environmental Controls; and Multi-use Conflicts.

The Tourism Ministry imposes strict regulations and guidelines for resort construction and operation. Some of the measures to limit the number of people in a resort island below the environmental threshold include:

(a) limiting the maximum built-up area to 20 per cent of the total land area;

(b) limiting the maximum height of the building to two stories provided that there is vegetation in the island to conceal these buildings.

(c) in construction of tourist accommodation, all rooms should face the beach and 5 linear metres of beach line has to be allocated to each tourist in front of their rooms. Only 68 per cent of the beach length can be allocated to guest rooms; 20 per cent has to be allocated to public use; and 12 per cent left as open space; and

(d) construction on reef flats and lagoons is discouraged. However, as over-water bungalows are very popular among tourists they are permitted provided equal open space is left on the land for each building developed on the lagoon (Ministry of Environment, 2006).

**Ensuring Sustainable Tourism**

Sustainable form of tourism has been followed in the Maldives meticulously for the simple reason that if the resources are depleted by overuse, then the tourism industry itself would be in jeopardy. In Maldives, multi-use conflicts (usage of the resource by more than one party) in the reef areas are primarily between tourism and fisheries. To solve problems that arise due to this conflict of interest, fifteen important dive sites have been declared as protected areas where anchoring, and fishing except for traditional bait fishing, is prohibited (NEAP II, 1999). Tourism is carefully managed so that it does not spoil the pristine natural beauty, so that it could be sustained for a longer period. The country’s tourism master plan identifies both the
underwater environment and the Robinson Crusoe factor as major attractions, but these are not seen as compatible with large-scale, low budget, mass tourism. The lack of local resources makes it necessary to import virtually everything a visitor needs, from furniture to fresh vegetables. This makes everything costly for a tourist and cuts into the development of the sector. Therefore, Maldives has been following a strategy of developing a limited number of quality resorts, each on its own uninhabited island, free from traffic, crime and crass commercialisation (Pandey, 2004: 153).

The concept of sustainable tourism, as developed in the United Nations sustainable development process, refers to tourist activities “leading to management of all resources in such a way that economic, social and aesthetic needs can be fulfilled while maintaining cultural integrity, essential ecological processes, biological diversity and life support systems” (UN, 2005). These sustainability concerns are, therefore, beginning to be addressed by governments at national, regional and local levels. In addition, given the leading role of the private sector in the tourism industry, many initiatives have also been taken mainly by this sector itself. Broadly speaking, the main policy areas regarding sustainable tourism are:

(a) the promotion of national strategies for sustainable tourism development, including the decentralisation of environmental management to regional and local levels;

(b) the use of both regulatory mechanisms and economic instruments;

(c) support for voluntary initiatives by the industry itself; and

(d) the promotion of sustainable tourism at the international level (Pandey, 2004: 180).

Generally speaking, the main priority of the government is to incorporate tourism planning and development effectively into overall sustainable development strategies. Given that in Maldives, local and regional administrations already have important responsibilities for tourism development, the central government also supports capacity building programmes at lower levels in order to enable local and regional authorities to better respond to the challenges of sustainable tourism.
development in the areas under their jurisdiction (Thakur, 2004: 9). Participation of local communities in decision-making and sharing of benefits also helps to generate better awareness of the environmental costs of tourism and thus provides strong incentives to conserve natural resources and protect local environmental assets.

Government, together with the tourism industry and other stakeholders, promotes or supports various efforts to raise public awareness about the impact of tourists on destinations, to promote respect for local communities and their cultures and to protect the environment (UNEP, 2006). Such public awareness campaigns often succeed in promoting positive behavioural changes not only in tourists, but also in tourism workers and host communities as a whole.

**Benefits of Sound Tourism Policy**

Direct benefits from tourism to conservation can be clustered in five areas:

1. a source of financing for biodiversity conservation, especially in legally protected areas;
2. economic justification for protected areas;
3. economic alternatives for local people to reduce overexploitation of wild land and wildlife resources on protected areas;
4. constituency-building, which promotes biodiversity conservation; and

**Waste Management and Disposal**

Regarding the disposal of the tourists’ waste, one prime example was that in the 1970s a German tourist company called LTU & CONDU made an agreement with the government that it would take back the waste generated by their tourists. For the effective disposal of waste, according to the government guidelines, all the resorts should have incinerators, compactors and wastewater management equipment, which are tax-exempt. To manage the water scarcity, Kinley has undertaken the desalination work and makes mineral water from the sea water for a price of $3 per litre for the tourists and at $1 for the local people’s consumption (UNEP, 2006). Tourist resorts...
run environmental clubs and cooperate for eco-friendly tourism. In addition, the Maldives’ Association of Tourism Industry is consulted before taking any major policy decisions regarding the tourism sector.

In its development process, tourism is often the overriding justification for government to support the creation of new protected areas. In addition, since the mid-1980s, the trend toward wildlife needing to “pay its way” and for local communities to be actively involved in conservation efforts has led to the emergence of ecotourism as a more responsible form of nature-based travel that promotes biodiversity conservation and also brings benefits to local communities (UNEP, 2006).

Preserving the Ecology

In the sphere of environmental management, an important aspect that the government envisions is preservation of the original ecological processes by effective environmental controls. To meet this end, removal of indigenous vegetation, disruption of marine ecology, redirection of original current patterns, and distortion of the wave patterns within the lagoon by construction of structures are discouraged (UNEP-RRCAP, 2002). Some of the environmental standards and controls in this area include:

(a) Control and mandatory replacement for each tree that is cut down. (Certain rare and large trees have to be avoided when constructing a building.) All buildings have to be located well away from the peripheral vegetation, at least 5 metres away from the shoreline to ensure that the peripheral vegetation most important for coastal protection is preserved,

(b) Allocating space for vegetation between two buildings. This is to ensure that substantial areas of indigenous vegetation are left untouched.

(c) All coastal works and larger projects have to be commenced after a thorough EIA. Hard engineering solutions for dynamic coastlines are discouraged.
(d) Construction of rock-filled jetties is controlled. Design of boat piers and jetties should such that they do not obstruct the original flow of currents or disrupt the wave climate within the lagoon.

(e) Construction of seawalls, detached and submerged breakwaters is restricted. Promotion of greater coral colonisation on the peripheral reefs and other natural methods to protect shorelines is encouraged (Ministry of Planning and National Development, 2006).

(f) Coral and sand mining from resorts and inhabited islands and from their house reefs is prohibited. More recently, certain specific locations have been allocated for sand and coral mining. Construction of structures with coral is now being controlled.

(g) Spear, poison and dynamite fishing are prohibited. Net and trap fishing are controlled and confined to certain areas. Removal of shells, fishing of turtles and tortoise, juvenile and gravid lobsters is prohibited.

(h) All resorts are required to have incinerators, bottle crushers and compactors. Solid waste has to be burnt, metal cans compacted and bottles crushed before disposal. Some of the resorts are now using organic waste as fertiliser.

(i) Sewage disposal through soak pits into the aquifer is discouraged. (Permission to do so is determined by the size of the island and amount of use of the aquifer.) Sewage disposed should be below the government-approved standard.

(j) Other environmental regulations include architectural controls. To preserve the aesthetic integrity of resort islands, the height of buildings is restricted to the height of the foliage of the vegetation. They have to be well integrated into the island (UNEP-RRCAP, 2002).

THE TSUNAMI AND ITS IMPLICATIONS ON GOVERNENCE

When the tsunami struck Maldives, most of the 1192 islands that form its archipelago were completely submerged for several minutes. The tragedy shattered the lives and livelihoods of a third of the population, causing widespread trauma and
distress. The disaster reduced to rubble decades of hard work that had made the Maldives one of the most rapidly developing countries in the world. Even though many islands were partly shielded by coral reefs, sixty nine islands suffered significant damage and twenty islands had to be evacuated (Dhivehi Observer, March 2005). At that time, the Maldivian government was in the midst of conducting their own study on how global warming was affecting the national economy and corroding its coastlines. The UNEP report concluded that the Tsunami generated approximately 2,90,000 cubic meters of waste on the country’s 69 inhabited islands. The Joint Needs Assessment carried out by the World Bank, the Asian Development Bank the UN System and the Government estimates the losses from the disaster at US $ 470.1 million or 62 per cent of GDP with financing gap on reconstruction of over $150 million. The non-tsunami budget deficit stood at approximately $80 million in 2005 (UNDP Maldives, 2006: 3). This estimate, however, does not include environmental costs and the value of the top-soil and reclaimed land that was washed out to sea.

The people showed a strong spirit of unity and support for each other during the disaster, by taking in the homeless, clearing the debris and providing solace and comfort. In recognition of the remarkable courage and strong sense of community shown by the people at a time of unimaginable loss and adversity, and in remembrance of those who lost their lives in the disaster, the government decided to mark 26 December as Unity Day (Maldives News Bulletin, May 2005: 2).

The government with the help of UNICEF responded swiftly to the disaster and aid came quickly to those affected by the deadly waves. The island’s communication network allowed officials to make contact with the most devastated islands and to assess the damage. A Crisis Task Force helped coordinate evacuations, mobilised emergency assistance, offered free transportation between islands and also ensured that the injured were brought to area hospitals (UNDP, 2006). The government worked with UNICEF to provide training to volunteers, who removed the hazardous waste and provided sanitation and health facilities.

The people, government and international agencies worked closely together to provide the basic needs of food, water, clothing and shelter. Temporary shelters were
constructed for the displaced with the active participation of the private players. Exactly one month after the disaster the President laid the foundation stone for the first batch of permanent houses in A.Dh Maamigili, for the people of M.Madifushi, who requested relocation upon the total destruction of their island (UNEP-RRCAP, 2006). Further, the livelihood component of the government programme provided loans for repairing and also to acquire new boats by the fishing community.

**Tsunami Recovery and Reconstruction Programme (TRRP)**

When communities are impacted by natural disasters or developmental challenges, various efforts are made for reconstruction. The Government of Maldives set up the National Disaster Management Centre to coordinate such trans-disciplinary efforts and services in the aftermath of the tsunami. Local communities, government machinery, NGOs and private players like the tourism operators and resort owners actively participated in the efforts with a unique trans-disciplinary approach for the first time in Maldives. While immediate attention was paid to restoring basic living conditions and re-establishing local infrastructure, long-term efforts focused on capacity building, increased resilience, disaster management and community empowerment.

The National Recovery and Reconstruction Plan was prepared by the Ministry of Planning and National Development with the assistance of the Ministry of Finance and Treasury in 2005. It outlined the objectives and strategies for meeting urgent immediate needs in housing and infrastructure development, reviving livelihoods, and creating the conditions for sustained economic recovery (UNDP, 2006). Some of the major objectives and priorities under this plan are to protect and regenerate vulnerable marine ecosystems, strengthen disaster preparedness and mitigation measures, establish early warning systems, improve protection and mitigation measures against wave impact in major islands, clean up debris, and implement policies and measures for sustainability of vulnerable marine ecosystems.

The plan contains projects and programmes proposed by different sectors to restore key industries and provide social and economic services and facilities. To
meet these needs and other expenditures it would be necessary to mobilise within 3-4 years, approximately three times the normal public investment requirements. In the face of the projected revenue shortfall of $60 million due to the tsunami, the challenge for economic recovery was to meet the financing requirements without increasing the debt service ratio above pre-tsunami levels (*Dhivehi Observer*, April 2005).

In response to the tsunami, the Government of Maldives with the assistance of the UNDP initiated a programme for Disaster Risk Reduction for Sustainable Development in the Maldives. Some of the key objectives of this programme are:

- to establish an institutional framework and policy for disaster management;
- to develop multi-hazard preparedness and response plans at the national, atoll and island levels;
- to promote awareness, training and capacity building activities (UNDP, 2006).

Key components of the programme are:

- Setting up the National-level Early Warning Systems was accelerated with the active participation of SAARC and other international donors like Australia, US, Japan, etc. An experimental system was put in place in the Indian Ocean at the end of 2006 (Ministry of Planning and National Development 2006). In addition, Disaster Risk Reduction Programme was mainstreamed into the developmental processes, where all the new projects would be evaluated with a component of disaster reduction and mitigation.

- Develop a multi-hazard disaster risk profile with vulnerability ranking for each island to facilitate better planning and judicious use of resources for development activities in the country. In conformity with this, the resort developers prepare their own safety measures with the consultation and guidance of the government. To support the Ministry of Tourism in a vision to make a “disaster-risk-free tourism environment” in the Maldives, a consultant facilitated the process of developing a framework for the disaster response plan within the Ministry.
• Facilitate setting up of National and Regional Level Emergency Operations Centre with better communication facilities. This would complement the efficient and effective functioning of disaster risk systems set up in the country. Local communities were trained on how to respond and rescue in an eventual scene of disasters.

• Provide safe shelters to ten most vulnerable communities. The development of Early Warning System is being complemented by the community shelter for protection of the most vulnerable families in the event of a disaster. UNDP has, through a consultation with the Ministry of Planning and National Development, prioritised ten islands for the construction of safe shelters. The first shelters were constructed in March 2007 in Felidhoo island of Vaavu Atoll. This has now been integrated with the Safe Islands Programme of the government. The project is jointly funded by the EU (ibid.).

• Enhancing skills and capacities for management of natural disasters at the national, atoll and island levels and supporting the formulation of community preparedness plans in each vulnerable island. These tasks were effectively accomplished with the training provided by the international organisations in removing the hazardous waste, emergency relief operation, etc. (SAARC Secretariat, 2006). These programmes and policies have resulted in developing a relatively safer environment for most of the vulnerable communities.

ADAPTING TO SEA-LEVEL RISE AND MITIGATING SERIOUS CONSEQUENCES

As the Maldives is very vulnerable to the predicted climate change and sea level rise, attention is given more to adaptation and mitigation measures rather than overcoming the problems. Accordingly, various programmes have been designed and implemented at the national level in areas such as coastal protection, freshwater management and coral reef protection. To protect the coral reefs the government has reduced import duty on construction materials, so that people do not mine corals for
National Policy and Programmes

collection purposes. Use of coral for government buildings and tourist resorts has also been prohibited and coral mining from house reefs has been banned.

In order to reduce the emission of greenhouse gases, the Maldives has started pilot projects on alternative sources of energy. Solar power has been used to power telecommunication sets, navigational aids and government office buildings and mosques in the islands. The main constraint to the widespread use of solar energy is the lack of technical backup and high installation costs (*Dhivehi Observer*, April 2006). Maldives has announced that it will become carbon-neutral in 2020, which is ambitious. Towards that goal, Maldives is now home to the first carbon-neutral stock exchange in the world. The Maldives Stock Exchange (MSE) teamed up with Carbon Neutral Company of UK to measure and offset its carbon emissions. The company had measured the greenhouse gas emissions associated with the MSE’s energy consumption, waste disposal, company controlled vehicles, business travel and staff commuting and purchased carbon credits to offset the emissions. Ibrahim Nasir, chief executive at the MSE, is of the view that due to its new carbon-neutral status, companies listed on the stock exchange will also look into and implement carbon emissions reduction programmes (Shahan, 2010). Additionally, organisations that implement comprehensive carbon reduction programmes can enhance their corporate reputation by showing customers, staff and prospects that they are taking direct action against climate change. If this becomes a huge success, Maldives has a chance of drastically reducing its carbon footprint in the foreseeable future.

Coastal flooding has been experienced in the recent past and the risks of flood damage resulting from high tides have not reduced in recent years. The degree of severity of some of these events has been increased due to improper coastal zone management and construction of poorly designed coastal structures. Proper management methods of the coastal zone are now gradually being introduced in the Maldives, and some research and consultations are now carried out in the construction and design of seawalls and coastal structures, as well as in the reclamation of land.
Solving the Problem of Internal Migration

Excessive migration to the capital city island of Malé, which has a higher standard of living and stronger sea defences than other islands, is straining the island’s resources. There is an urgent need to develop centres of growth in the atolls to improve the standard of living and to encourage people to remain there. Consequently, the government has given priority to its regional development strategy to develop larger, safer and more sustainable islands in the atolls where people can live more comfortably with improved job opportunities.

In 1998, the government established a policy of regional development and decentralisation to ensure services are delivered in a cost-effective manner to the people in the outer atolls and to reduce the drift of people towards Malé. The strategy promotes the development of one larger “focus island” per atoll, which is more economically and socially sustainable. Since 2004, the strategy has been enhanced to provide better protection from natural disasters and to ensure environmental sustainability. Migration to this “focus island” is voluntary (Ministry of Atoll Administration, 2006).

One of the ambitious projects of the government was land reclamation of Hulhu-Malé. This project, intended to solve the housing problems facing Malé, was begun on 16 October 1997. This ambitious project was carried out in three phases. A total of 7.45 sq km of land was reclaimed: 2.35 sq km was taken for housing; 119,000 sq metres was taken for a modern commercial port and an environmental protection zone. This was reclaimed to a height of 1.5 metres above sea level; the desired height of 2.5 metres was not possible due to lack of soil (Maldives News Bulletin, 17 April 2003: 7). There are also plans to join the nearby islands through land reclamation. This project is a precursor to the government’s “Safe Islands” programme.

The Safe Islands Programme and its Features

Even before the tsunami struck, the Ministry of Planning and National Development had developed a plan to construct so-called safe islands in each of the twenty atolls under the Safe Islands Programme, also called the Focus Island Programme.
Programme. To mitigate the effects of a future sea-level rise, to restore the island and to create a safer and larger island for the local population, a reconstruction plan has been developed by the National Disaster Management Centre. These safe islands will have a much higher protection from natural and other disasters, through seawalls, vegetation enclosure surrounding the island, and drains to clear away floods should there be high waves. Vilufushi has been selected as safe-island location in Thaa Atoll (Ministry of Environment 2006). To cater for future population growth the new safe-islands will be generally much larger than the present islands; this would lead to more efficient use of socio-economic infrastructure such as health and education infrastructure and provision of energy. After the tsunami devastation, this project has been given high priority.

The houses have been built to provide security from the dangers of tsunami, flooding and coastal erosion. The present plan for post-tsunami reconstruction of the island of Vilufushi (first of its kind) is in line with the Safe Island Programme. The design includes a higher land level of 1.4 metres above sea level and a protecting bund wall on the east side of the island of 2.4 metres above sea level and areas of high ground. The bund wall is part of the Environmental Protection Zone which has palm trees on the island side. The island would be enlarged from 16 hectares at present to 60 hectares. To go with the enlarged island, a new and larger port area needs to be created, as fishing is one of the main activities of the island’s population and also to facilitate general transport (State of the Environment report, 2006). Table 6.1 presents the main land-use categories in this development.

**Table 6.1. Main land-use categories areas in the Vilufushi Safe Island Programme**

<table>
<thead>
<tr>
<th>Category</th>
<th>Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Existing island Housing</td>
<td>11 ha</td>
</tr>
<tr>
<td>Existing island Green zones</td>
<td>5 ha</td>
</tr>
<tr>
<td>Reclamation Housing</td>
<td>36 ha</td>
</tr>
<tr>
<td>Existing island EPZ</td>
<td>9 ha</td>
</tr>
<tr>
<td>Total</td>
<td>61 ha</td>
</tr>
</tbody>
</table>

The island will in future provide space for housing and social infrastructure for up to 5000 inhabitants: the pre-tsunami number of inhabitants was approximately 1800. Most of the houses, under the Tsunami Recovery and Construction Programme, would be built in these newly created safe islands, where the first phase of this project
was completed in 2007. Total cost of the project is between 15 and 16 million Euros. But because of the global economic slowdown in 2008, there has been a setback in the completion of these projects.

The project would also include the following construction activities:
• Debris removal from old Vilufushi and surrounding seabed
• Dredging and reclamation of coral sand
• Finish original island to new (safe) levels
• Construction of revetments
• Dredging of new harbour
• Construction of quay wall
• Construction of harbour breakwaters
• Mitigating measures for environment (ibid.).

The specific objectives of the development of focus islands is to ensure that:
• their vulnerability to sea-level rise is reduced through sustainable environmental planning and environmentally sound sea defences;
• their populations have access to adequate educational, health and other social programmes within the framework of national policies, sustainable water, energy and waste facilities, quality housing resistant to damage by tidal waves and rising sea level, and improved job prospects (European Commission, 2007).

The following are the criteria for the choice of “safe islands”. They must have:
• easy access to an airport;
• sufficient space and potential for reclamation and/or the possibility for connection with another island;
• sufficient space for subsequent population growth;
• a viable economy and social services (Ministry of Planning and National Development, 2006).
Disaster Risk Management Programmes

The government has also identified some policies for effective implementation of disaster risk management in future. Some of them have already been put in place. They include:

- Identifying possible disaster risks and developing frameworks to address them;
- Strengthening the institutional and legal systems for disaster risk management;
- Facilitating establishment of actionable early warning system;
- Vulnerability assessment for disaster preparedness planning;
- Enhancing disaster resilience of economic sectors and key infrastructure;
- Alternative communications and network resilience;
- Development and implementation of disaster preparedness plans and emergency response;
- Development of host islands for relocation from vulnerable islands (Dhivehi Observer, March 2005).

The government has developed a strategy for increasing the safety of island communities by redesigning the physical development features of islands and incorporating measures such as wider environmental protection zones, creating elevated areas for vertical evacuation in the event of floods, and providing easy access during emergencies. The new houses for the people affected by the tsunami have been built on the newly created elevated surface in the islands as a protection against future flooding.

Imparting Skills and Knowledge Through Training

Apart from shortage of funds, Maldives also lacks technical knowledge and expertise. There are no scientific institutions to undertake regular scientific investigations and develop a permanent data base (SAARC-CCNDPPE 17, 1992: 197). At one point, after the tsunami, Maldives was keen to create a multidisciplinary National Institute for Coastal Zone Management. As a first step, an environmental research unit was established under the environment section of the Ministry of Planning and Environment. In due course, the SAARC Coastal Zone Management
Centre was established with the help of the regional scientific community in 2005 in Malé to coordinate environmental protection and conservation along the coasts of the member countries.

Nevertheless, one of the main drawbacks of Maldives is that it lacks trained personnel in coastal and environmental management. The number of trained environmental officers is in short supply, reducing their ability to enforce environmental and related legislation. For instance, the capacity of the Environmental Research Unit is limited in terms of both human resources and technical capability. As a result, the importance of overseas courses and local training centres with international cooperation in increasing the national capacity for environmental management has been recognised. Similarly, indigenous knowledge about natural resources and local community’s genuine concerns to protect their island’s biodiversity also plays an important role.

The government of the Maldives has given priority to enhance the existing capacity of human resource development, especially in the field of coastal zone and environmental management. Postgraduate training has been given to members of the Climate Change Project team under the Global Environment Facility (GEF) Climate Change Enabling Activity. The project has further trained local residents in monitoring and assessing the changes in their island environment. The GEF Climate Change Enabling Activity facilitated a special postgraduate-level training for six members of the project staff. One of the objectives of the Climate Change Enabling Activity was to train seventy-five local residents from selected islands in coastal management issues, with practical instruction in beach surveying and other monitoring and data collection procedures (GEF, 2006). This was aimed at building the capacity required to measure and monitor baseline environmental conditions against which to assess vulnerability to future changes on outer islands. This objective was integrated into an existing programme of training local residents. There have been three training rounds conducted under the project. A total of sixty-three Maldivians were trained till 2006. This number includes at least one person from each of the twenty administrative atolls. The project aims to train one person from each of the 199 inhabited islands (Ministry of Environment, 2006).
The third training round was conducted as a joint activity with the Southern Regional Development Management Office in Addu Atoll. It included beach surveying and other monitoring techniques and also aimed to increase awareness of environmental issues. The course content covered the following main modules: basic meteorology, basic oceanography, solid waste management, beach surveying, coastal zone management, reef surveying, biodiversity and environmental law (Ministry of Planning and Development, 2006). Research was also conducted in areas like the effect of climatic variation on fisheries and the effects of climate change on human health. Dengue and dengue hemorrhagic fever have been identified as potential climate-change-related diseases. It is very important to establish partnerships with other international research institutions and also with other small island countries in research related to climate change and sea level rise.

Though these trainings can fill some void in its pursuit of expertise and national security in different spheres, Maldives lacks basic infrastructure and quality in higher technical education. Only in 2011, a new Maldivian National University was established and it has to go a long way in creating good curriculum and providing quality education to the students. In pursuit of those goals, it has to have some students exchange programmes with other universities and centre for excellence in the region, particularly in its neighbourhood. MOUs should be actively facilitated by the government to bring down expenses for the students who go abroad to gain knowledge and expertise.

**POPULATION AND DEVELOPMENT CONSOLIDATION PROGRAMME**

According to Mr. Mohamed Shareef, Executive Director and Mr. Mohamed Imad, Director (Spatial Planning) from the Ministry of Planning and National Development, Government of Maldives, one of the very important programmes undertaken by the Maldivian government was the Population and Development Consolidation (PDC). It consolidates the development of community by transferring the communities living in the endangered islands to other islands with the support of the government, which otherwise would cost a lot of money and burden for the community in danger. This facility is provided to all communities, irrespective of the...
size of the islands. These are all voluntary migration and no one is forced to leave their place. The only condition is that, all the people living in that particular island should give in writing that they are all willing to move, thus consensus was given importance. In Kandholhudhoo, a densely populated island in northern Maldives, 60 per cent of residents had volunteered to evacuate their island. Regional growth centres are also developed and significant benefits like health, education facilities and employment opportunities are provided to attract migration, thus reducing the number of inhabited islands. This also helps in allotting more funds for environmental protection under the Safe Islands Programme (State of the Environment report 2006). The State of the Environment reports give a detailed account of the policies and measures undertaken by the government.

For the proper management of each island, a master plan is being prepared separately. This has been a continuous growth module for thirty years. Atoll chiefs undertake all the policies and programmes of the government. Elected councils act as local governments with powers to levy taxes and charges. The National Commission for the Protection of Environment (NCPE) is a major player where all the major issues related to the environment are discussed. Vision 2020 set out by the government forms the benchmark for national planning (Department of Planning, 2010). Thus the government’s policies were correlated to each program for effective implementation. According to Mr. Mohamed Shareef, “since Maldives’ problems were unique with respect to environment and natural resources, it is not following any model undertaken in other countries. Thus it is a big challenge to find all the solutions on its own”. Mr. Mohamed Imad, stress the importance of cooperation among different ministries and of the infrastructure needed for better environmental protection.

PROMOTION OF TOURISM

Tourism was introduced to the Maldives in the early 1970s. The first two resort islands had a capacity of 280 beds. The first tourists arrived mostly as individuals or small groups. Soon, Maldives began to be recognised as an

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3 As told to this researcher in New Delhi at a conference organized by The Energy and Resource Institute on 24th January 2007.
international tourist destination. In 1972, the first tourist resort, Kurumba Village (today a five-star hotel), was pioneered by two Maldivian entrepreneurs in association with an Italian investor. A second resort was opened the same year on the island of Bandos. Despite the basic facilities and services, 1096 tourist arrivals were recorded that year. At the start, the country’s tourism and its development were for the most part dependent on private initiative. In 1979, the Tourism Law was enacted, requiring all foreign investments to be registered at the Department of Tourism and Foreign Investment. A Tourism Master Plan was formulated in 1983, setting up guidelines for the overall development of tourism, and identifying tourism zones in different parts of the country. In 1984, a Tourism Advisory Board was created and the Department of Tourism was upgraded to a ministry in 1988. The opening of Malé International Airport in 1981 was an important milestone in the tourism business. At the early stages, tourism in Maldives was a seasonal industry. As the country opened up further, this seasonal nature of tourism changed dramatically. In the later part of 1980s tourist arrivals were recorded throughout the year. In 1987, a school of hotel and catering was established. The private sector and the government are actively involved in the promotion and marketing of the tourism product. Consequently, Maldives is represented in all major international travel fairs by both the government and the private operators. The tourist information counter at the Malé International Airport hands out leaflets and other information about the country. The Tourist Information Unit was formed in 1989 to further disseminate information to far-off potential customers in different European countries.

The money for tourism marketing comes from both the industry and the government. Secretary General for the Maldives Association of Travel Agents and Tour Operators (MATATO), Mohamed Maleeh Jamal, said that after the tsunami the marketing budget drastically increased to about $9 million per year, but declined in 2008 due to the economic depression to $2.5 million, used mainly for destination marketing. Marketing the brand Maldives is done using various tools such as regular road shows in China, Eastern Europe and the Middle East and also participating in international travel fairs. Advertising in magazines and television channels like BBC, National Geographic and CNN is also done. Government is of the view that the
reputation of Maldives as a frontrunner in fighting climate change is in itself akin to large-scale marketing.

Maldives Tourism Promotion Board (MTPB) started branding its tourism industry 2000 onwards. They marketed with a logo (see Figure 6.1) and a slogan, “The Sunny Side of Life”. The slogan was great for the European market as visitors from countries such as the UK considered the sun a key attraction. But as the global financial slowdown set in, reducing the number of visitors from Europe, China topped the list. This situation prompted the administration to go for a re-branding. In 2011, the Maldives Marketing and PR Corporation (MMPRC) replaced MTPB and Maldives officially re-branded itself with a new logo (see Figure 6.2) and slogan, “Always Natural”.

The objective in creating the new logo and slogan was also to create a brand in which Maldivians around the world can be proud. The authorities are of the view that the brand should talk to the Maldivian people, about industry, sustainability and environmental challenges and successes the Maldives has had. The slogan ‘always natural’ emphasises the huge influence the natural world has on the Maldives. The new logo and slogan replaced the Maldives’ 11 year-old branding, ‘The Sunny Side of Life’. The old tag line was more targeted towards the tourism industry and the new branding broadened the brand to attract investment in industries such as energy and fisheries. This new broader national branding would allow cross-marketing opportunities, such as stamping the logo on Maldivian products such as tins of tuna. A can of Maldivian tuna sold in Marks & Spencer or Waitrose is reaching exactly the market they need to reach for tourism (Robinson, 25 October 2011).
PROMOTION OF FISHING SECTOR

The fisheries were the dominant sector of the economy until 1985, when the tourism industry overtook the fisheries in terms of contribution to GDP. The economic reforms programme by the government in 1989 lifted import quotas and opened some exports to the private sector in the fishery industry. Subsequently, it has liberalised regulations to allow more foreign investment. Mechanisation of the
“dhoni” (traditional small sailing boat) in 1974 revolutionised the fisheries industry. A new generation of “dhoni”, designed especially for mechanisation, was introduced. The first fish canning plant was established on the island of Felivaru as a joint venture with a Japanese firm, in 1977. In 1982, the government took over the cannery and it was unable to meet the overseas demand due to the poor condition of buildings and equipment, so a new factory was opened in 1986. In 2006, this cannery was upgraded from 50 tons to 1000 tons capacity. Other facilities include freezer storage and a freezing plant as well as a privately owned cannery. In 1979, the Maldives Fisheries Corporation (MFC) was formed and a Fisheries Advisory Board was set up. The MFC later became the Fisheries Projects Implementation Department (FPID), which was transformed into Maldives Industrial Fishers Company (MIFCO) in 1993. Human resource development programmes were begun in the early 1980s, and fisheries education was incorporated into the school curriculum. In the early 2000s, parts of MIFCO, including some of its processing facilities, were put up for sale to private investors. Government interventions have been instrumental in keeping the industry and livelihood of the people afloat during hard times when tuna availability declined or global market prices fluctuated.

The Maldivian government encourages the fishing industry to undertake pole and line method of fishing, which is an environment friendly method. A pole and line consists of a hooked line attached to a long pole. From their fishing vessels, used primary for catching of tuna and skipjack, the fishermen stand on the railing or on special platforms and fish with poles (see Figure 6.3). This type of fishing is also sustainable for a longer period without destroying the fish stock by overfishing. The pole and line method used in Maldivian fisheries has the lowest numbers in by catch and one of the most (if not the best) sustainable and effective methods in getting the targeted species. This traditional pole-and-line method of fishing creates good value in the European markets where high standards are set for environment-friendly fishing techniques and modes of production. Yellow-fin tuna, the third-largest in the tuna family after blue-fin and big-eye, are usually accompanied by dolphins; it is very important not to catch the dolphins in the process. The pole-and-line method ensures

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4 The art of cutting raw fish according to specific needs of the fishery industry and its end products.
Poaching of fish in Maldives’ EEZ has become a security problem for the country. The poachers use the long-line fishing and purse-seining methods (commercialised unsustainable method of fishing) with their trawlers. There is a school of thought that Maldivian fishermen also should be allowed this kind of fishing. But, if this happens, Maldivian products, particularly the Maldivian tuna, could lose their appeal of being environment-friendly. The main European importer of Maldivian products, Marks&Spencers (M&S), has strong business principles of sustainability, which include recycling waste, ethical trading and animal welfare, plus a sustainable sourcing policy for fish. In 2009 M&S was the first British company to sign the World Wildlife Fund’s seafood charter, committing to source all seafood sustainably by 2012. The British market has become essential to the Maldivian economy and they can’t ignore ethical trade practices set by business houses.

The Maldivian government has also put in place appropriate laws to curb over-fishing and damages to its corals, because healthy corals are the habitat of the fish stock. Mining of the black corals is now banned. Sharks, which used to be prolific in Maldives, have now dwindled due to over-fishing, mainly because of China’s demand for shark fins. Shark fishing is now banned in Maldives. The giant clam fishery was very short-lived, lasting about a year in 1990. Giant clam fishing was banned in 1991.
Turtles used to be exploited for local trade and consumption for hundreds of years. They were further exploited to provide curios for the tourists. A moratorium on catching turtles has been in force since 1995 (FAO, 2009). Likewise, the most popular species of sea cucumbers have been overexploited, resulting in near collapse of the fishery in 1997; this fishing is now regulated with strict sustainable methods. Factors which have increased fish catches include an increasing number of mechanised and motorised boats, installation of fish-aggregating devices, and improvements in infrastructure. Fishery research is carried out by the government-run Marine Research Centre to bring in appropriate technology and sustainable practices.

**ECONOMIC REFORMS AMIDST FISCAL PROBLEMS**

Although, tourism and resort industries are doing well in the past three years, the Maldivian economy suffers from large fiscal and external imbalances. The IMF (IMF-Maldives 2011) observed:

> The Maldives has recently faced challenges with respect to inflation, but there is no indication that inflationary momentum has risen. The introduction of the exchange rate band was a welcome step, but it needs support from a tightening of fiscal and monetary policies. The mission and the authorities agreed that such a tightening of policies would be important to promote fiscal and external sustainability, continued growth, and low inflation.

To help the Maldivian government, the IMF had approved a three-year economic programme in 2011, after the government agreed to a package of policy reforms that will help stabilise and strengthen the Maldivian economy. It agreed to a “medium-term” policy from the government to reduce its budget deficit “substantially”, both through additional revenue measures and through expenditure restraint (Robinson, May 2011). This has been necessitated due to the increase of expenditure in payments to civil servants in the past couple of years. According to the World Bank, a 66 per cent increase in salaries and allowances for government employees between 2006 and 2008 was “by far the highest increase in compensation over a three year period to government employees of any country in the world” (Bosley, April 2012). The doubling of spending on state salaries in 2007-09 crippled the country’s economy (see Figure 6.4), and left the Maldives facing the most
challenging macroeconomic situation of any democratic transitions that has occurred since 1956 (World Bank, 2010).

**Figure 6.4. Inflated spending on salaries in 2007 sparked an economic crisis**

This problem was compounded by the graduation of Maldives from the group of Least Developed Country (LDC) list to the middle income group of countries under the UN’s definitions at the beginning 2011, depriving it of a number of financial concessions and eligibility for some donor aid. Maldivian officials are of the view that the existing process of transition was underdeveloped, particularly the repeal of all special financial and technical assistance. The Maldives has a profitable tourism industry and a GDP of over US$1 billion, however a generous taxation system and the relative isolation of this industry from the country’s economy – particularly its banking sector – has limited the benefit for ordinary Maldivians (*Minivan News*, March 2011). The government has been steadily reforming the taxation of the tourism sector and has recently introduced a tourism goods and services tax and business profit tax.
After a prolonged period of imprudent tax structures, Maldives is now coming to terms with a reformed tax system, following the introduction of a General Goods and Services tax in October 2011. The new system is a consequence of recent political changes. After the 2004 democratic reform, costs increased in general and these costs had to be met by additional revenue, but were not available to the government. In 2011, the Maldives had a state deficit of Rf1.3 billion (US$85 million). Since democratisation, the Maldivian government has surpassed other national governments’ employment rates by employing 10 per cent of the national work force. One third of government spending goes to state employees, and nearly half of the 2011 budget was spent on salaries and allowances.

The Goods and Services Tax (GST), which became operative in October 2011, has raised a 3.5 per cent tax on certain items. Contrary to an earlier tax, which was paid at the time of import and effectively invisible to the customer, the GST requires most businesses to charge an additional 3.5 per cent directly to the customer at the time of sale. Nevertheless, certain items are tax exempt, a detail which has allegedly made it difficult to implement at stores selling a variety of products (Johnstone, October 2011). The GST is part of a larger tax reform system described in a package of policy reforms that will help stabilise and strengthen the country’s economy agreed to by the Maldives and the International Monetary Fund (IMF) in May 2011. The policy reforms include raising the Tourism Goods and Services Tax (TGST) from 3.5 per cent to 6 per cent from January 2012, and to 10 per cent in January 2013. The tax bill is divided by type of sale and the sales are defined as either tourism goods and services (phasing out the ‘bed tax’ which currently stands at US$8 per night), or goods and services for sectors other than tourism. Currently, the combined goods and services tax (GST) contains a general GST of 5 per cent, and an increase to the existing tourism GST (TGST) has been increased from 3.5 per cent to 6 per cent.

One of the government’s main achievements was introduction of austerity measures in October 2009, while maintaining the public sector pay cuts along with a successful redundancy programme with the help of the Asian Development Bank. The government also brought in a bold policy decision regarding the introduction of personal income tax but only for those who earn above Rf 30,000 (US$1900). All
citizens and non-citizens who earn their income in the Maldives will be eligible for the tax. For naturalised citizens and residents, income earned abroad will be taxable as well. The income tax is progressive and divided into five tax brackets, whereby people with higher income would pay higher rates. The tax rates are set at three per cent for monthly incomes between Rf30,000 and Rf40,000; six per cent for incomes between Rf60,000 and Rf100,000; nine per cent for incomes between Rf100,000 and Rf150,000; and 15 per cent for Rf150,000 and higher. The legislation specifies 15 sources of income that would be considered taxable, while Zakat funds (alms for the poor), pension contributions, interest payments and capital allowance or investment would be exempted from taxation (Naish, July 2011). There were opposition to this measure on the grounds that the country’s unique geography, limited natural and human resources, and high cost for investments in the country did not make a direct tax advisable in the current economic climate. But the government was firm in its new policy initiatives and the Maldives Monetary Authority (MMA) also ceased printing money to finance the budget deficit – deficit monetising – in September 2009 and it was a big transformation of monetary policy in the Maldives. In 2011, they also devalued the rufiyaa within 20 per cent of a Rf 12.85 peg, which saw it rocket to the maximum Rf 15.42 per US$ where it now remains and also replaced the fixed exchange rate with a managed float rate. This was mainly done to solve the dollar black market problem and to bring the value of dollar eventually down in future.

In addition, the government’s pledge in 2010 to the seven per cent contribution from public sector employees to the pension fund resulted in an additional Rf94 million (or 0.5 per cent of GDP) in expenditure of the year. The new structure of island and atoll councils are meanwhile expected to cost the government an extra Rf173 million (US$13.5 million) per year (Naish, December 2010). All these issues require consolidated and strong fiscal policies combined with prudent economic practices to save the Maldivian economy from any default.

As the Maldives is one of the most open economies in the world with imports accounting for over 90 per cent of GDP, the report warns that rising international food and fuel prices could worsen the trade deficit, put pressure on foreign exchange reserves and increase consumer price inflation. While the Balance of Payments...
situation improved significantly in 2009 with a faster contraction in imports relative to exports, rising import prices have contributed to a widening trade deficit (World Bank, 2010). According to the World Bank report on Maldives (2011), one positive aspect of the rising value of commodity imports is that fiscal outcomes could improve, if planned expenditure cuts are implemented, since 30 per cent of government revenues come from import duties.

**NATIONAL RESPONSE TO COUP AND RELIGIOUS EXTREMISM**

Following the coup attempt in 1988, the ruling regime took a conservative approach, centralising all the powers of the state. It was an irony that the coup was actually funded by a Maldivian, mainly because of the high handedness of the government of the day, but after the misadventure, the ruling class’ hold on the nation got stronger. People were arrested without reasons, dragged on the roads of Male and beaten up in front of others. They were tortured and served whatever prison sentences they were given behind bars at the mercy of the ruling regime.

When the coup was attempted, the Maldivian National Security Service (NSS) had its members only in few hundreds and they were all ill-trained and under-equipped to confront a security threat. But they did well in defending their headquarters and taking the president and some prominent ministers to a safer place, till they got help from the Indian forces. After this incident, Maldives upgraded its security forces with modern weapons, equipments and better training facilities. The service conditions were made more attractive. More funds were allocated for defence and joint training operations were commenced with neighbours, particularly with India.

Religious extremism in Maldives has been a recent phenomenon particularly more visible in the last decade. There are various reasons for this trend and two reasons stand out prominently. One being the strict vigil and control, the former President Gayoom had on the religious affairs of the nation which helped in a way curbing the freedom of religious expression and thus forming the foundation for
extremist tendencies. The other being the introduction of the multiparty democracy and the ensuring freedom of speech and expression.

During Gayoom’s rule, he had a rigid policy on religious matters and tight control on the functioning of the religious speakers and their preachings. Religious sermons were given only by the people who had been authorised by the government, at the place and time sanctioned by the government. Even after the 9/11 attack on the US, this has been the practice in Maldives. Elements, who wanted to support the jihadist cause, were not able to do so because of the restrictions, the state put on them. There were also instances that during Gayoom’s rule some religious conservative men were picked up from the streets and their beard was shaved off using the tomato sauce. Things changed on a faster phase when the pressure to bring multiparty democracy was mounted.

The new constitution of Maldives in its chapter II confers freedom of expression, freedom to assemble and strike. Clause 27 of the constitution says that “Everyone has the right to freedom of thought and the freedom to communicate opinions and expression in a manner that is not contrary to any tenet of Islam”. This directly gives freedom to talk on religious matters without any restrictions as the case in the previous regime. Clause 32 says that “Everyone has the right to freedom of peaceful assembly without prior permission of the State”, and this gives a free hand for the radical elements in the society to take advantage of the situation to disseminate their ideas and this resulted in the radicalization of the youth to some extent.

Some of the radical elements got a face lift after the first multiparty elections in 2008, when the Adhaalath Party (Justice Party), a conservative Islamic party became a part of the ruling coalition after the first multiparty general elections were held in 2008. The inclusion of Adhaalath in the ruling coalition has given the party a new legitimacy. In control of the Ministry of Islamic Affairs it has been able to wield far more influence on religious affairs than it has in the past. It exercises clout far greater than that which its support base would merit or could achieve. But sources in government say that with Adhaalath in the ruling coalition, the government is able to deal more easily with the more extreme Salafis on various religious issues. Besides,
Adhaalath in government is less dangerous than outside. They believe, keeping them out of the government would push them to the fringe and could encourage them to join hands with the Salafis (Ramachandran, 2009). Interestingly, when this researcher interviewed the Minister for Islamic Affairs, Hussain Rasheed Ahmed in Maldives and asked about the free run and space given to the Islamic radical groups in the local radio channels to air their views and who propagate hatred towards its own citizens, the minister’s reply was that the ministry is just giving equal space to all groups without prejudice like the Gayoom’s regime did. The minister argued that they have been given freedom to vent their grievances, so that they don’t behave violently. This approach of the ministry was fraught with lot of peril and this is one of the reasons why the radicals grew from strength to strength in a short period of time in Maldives.

After the first multiparty general elections held in 2008, a new portfolio of the Ministry of Islamic Affairs was created and the Adhaalath Party was given the charge of that ministry. They started to give a free hand in organising religious sermons, with no restrictions on the speakers and the subject to be delivered upon. This resulted with hate speeches spreading against the society who are not pious according to their terms, conditions and definitions. In the meanwhile, some radical groups started preaching hatred towards other religions, undermining President Nasheed’s government, accusing him of being a co-conspirator with the Christians and Jews in the process of introducing Christianity in Maldives and trying to wipe out Islam form the country, charges which Nasheed denied vehemently. The Maldivian government is now considering a legislation to tackle terrorism and a strong counter-terrorism bill is in the cards. Though cooperation with India on counter terrorism activities and preparedness gives an impetus to the process, the solution to countering terrorism is definitely domestic. Maldivian government will have to rein in the religious extremists if they are keen to deny terrorism a safe haven in Maldives.

Conclusion

The security problems facing the Maldives are with regard to sea-level rise, natural disasters, biodiversity and vegetation loss, environmental pollution, religious extremism, and threats to the political order. The government has so far been
successful in formulating effective implementation of programmes for the protection of the country’s environment, thus ensuring economic viability in the spheres of tourism and fishing industries. But a holistic integrated approach is needed in developmental process to ensure sustainability.

Maldives has not yet fully recovered from the repercussions of the 2008 global economic slowdown which hit its tourism sector badly. Maldives openly advocates restructuring the international financial organisations so that they are receptive to the concerns of small island states. For this to happen, the international community has to come forward and amend the current structure of the international economic practices and environmental discussions. With the introduction of multiparty democracy, Maldives has been witnessing the rise of fundamentalism in its domestic politics, with increasing incidents of religious intolerance, aggravated by the madrassa-educated youths returning from other countries, particularly from Pakistan. Signs of terrorism are also showing up in Maldives, coupled with the presence of huge drug abuse by its youth. This menace can only be solved by effective cooperation with the international community by sharing intelligence data and technology-driven counter operations.

The next chapter looks into the international cooperation extended to Maldives in terms of bilateral, multilateral and regional assistance in solving its non-traditional security challenges.