

Keeping Maldives pristine

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THORIQ IBRAHIM completed his undergraduate studies at Loughborough University of Technology, and his MSc in Building Science at the National University of Singapore. He also holds an MBA from Preston University in the USA. As an engineer he has been involved in many of the major building projects in the Maldives, and other projects worldwide and via his work with Singapore based Black & Veatch (SEA). He was appointed Minister in November 2013 and also serves on the board of the Special Economic Zones.

Climate change presents the Maldives with many challenges. In the past six years, more than 90 per cent of the inhabited islands have reported flooding, and just about every island now suffers from shoreline erosion, a problem that also affects around half of tourist resorts.

The ocean that surrounds our nation is one of the most diverse marine environments in the world, home to 250 species of coral, teeming with over 1,000 species of fish, including iconic mega-fauna such as whale sharks and manta rays, as well as large populations of marine turtles, seabirds, whales, and dolphins.

Atoll ecosystems provide the basis for two of the country's economic mainstays: fisheries and tourism. For an island nation like the Maldives, the importance of coastal and marine ecosystems cannot be overstated, since the limited availability of land constrains the development of agriculture and manufacturing. In response to the challenges of ensuring the sustainable management of the country's resources, the government wants to establish the Maldives as a UNESCO Biosphere Reserve.

Broadly speaking, the plan aims to create a model of sustainable development through conservation and restoration of the country's environmental assets. This includes the introduction of a coherent network of coastal and terrestrial protected and managed areas, to be complemented by the transformation of the economy through a low-emissions development strategy, and the consolidation of conducive governance structures that emphasise decentralised decision making with regard to environment and development.

The revised plan will initially see the consolidation of protected areas within the boundaries of the tourist resorts integrated into the model. These areas are well managed and can be integrated into the Biosphere model. The success of this depends on forging new partnerships between the Maldivian government and international agencies to provide financial and technical support, as well as working with civil society and the local private sector.

Waste disposal

Waste is a particularly challenging issue for the Maldives. Around 860 tons of solid waste is discarded in the Maldives every day. A number of initiatives are underway to establish sound waste management systems at the island, regional, and national level.

Building island-level waste management centres, regional waste management facilities, privatising waste collection and using waste to produce energy are some of the initiatives underway.

We now have a solid waste management policy that integrates internationally accepted principles. With assistance from donor agencies and government funding, 133 island waste management centres have been constructed. The government has recently started building waste management infrastructure on inhabited islands. Most of these island waste management centres have already exceeded their storage capacity due to a lack of final disposal mechanisms and a lack of awareness of proper waste management practices among many island communities.

The government takes a regional approach to waste management that seeks to cluster atolls. The first of these is expected to be operational over the course of this year. It covers four northern atolls and plans to process 52 tons of waste daily for 45 inhabited islands (over 7,000 households), 15 operational resorts, 15 resorts in development, and nine industrial islands. Depending on the success of this pilot programme and access to development funds, further regional facilities will be built.

For example, the Thilafushi waste disposal site is a non-engineered low-lying landfill operated by Malé City Council (MCC). Waste stockpile at the site is frequently burned, sending massive plumes of dark smoke into the atmosphere. To address the problem, the Ministry of Environment and Energy plans to establish a technologically advanced, environmentally sound and commercially viable waste management system for greater Malé that will see the Thilafushi disposal become a regional waste management facility.

Water management

Rainwater and desalinated water are the primary sources of drinking water in the Maldives. The population is dependent mainly on shallow ground water wells for freshwater needs, but a lack of proper sewage and wastewater disposal facilities have affected most of the groundwater aquifers. Increasing salinisation of the already stressed freshwater aquifers on many islands is affecting quality of life, while saltwater intrusion is impacting agriculture.

The key national policy on water and sanitation has always been to provide access to safe drinking water

and improved sanitation to all Maldivians. Provision of access to safe drinking water and adequate sewerage systems became a constitutional right for the first time in 2008. The Government of Maldives is also committed to the goals of the International Decade for Action and the Millennium Development Goals, including goal 7, Target 10: “Halve, by 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation” and is exerting every effort to increase the number of people with access to safe drinking water and improved sanitation.

In terms of energy the Maldives is entirely dependent on imported oil, exposing it to price fluctuations. This problem is further exacerbated by the lack of adequate oil storage facilities in the country.

Energy efficiency

To reduce dependency on fossil fuel, the Maldives is investing in renewable energy technology on a large scale through its SREP renewable energy programme, which aims to stop using diesel for electricity generation and to meet the government’s objective of 30 per cent of day time peak load electricity being produced by RE in all inhabited islands by 2019.

To implement the SREP investment plan, the Maldives has received grant assistance from the Strategic Climate Fund, the Asian Development Bank, the World Bank, the European Union, Australia, Japan, and Germany. The European Investment Bank and the Islamic Development Bank have provided concessional loans.

The renewable energy potential of the country is being assessed through mapping, met masts, and solar irradiation stations throughout the islands.

In parallel, a nationwide energy efficiency campaign called “It’s Cool at 25” has been initiated to increase awareness on energy efficiency by limiting air conditioning to 25° celsius.

Global policies and strategies

Climate change is a cross-cutting issue for the Maldives, as recognised in The Maldives Climate Change Policy Framework (MCCPF), the key document guiding both domestic and international efforts to combat climate change through eight principles, namely: climate leadership, intergenerational equitability, mainstreaming climate change, relevant international commitments, multinational partnerships, transfer of technology, and climate resiliency. The MCCPF is geared toward achieving five

principal goals, namely: sustainable financing, low-emission development, adaptation and opportunities, capacity building and leading advocacy at climate negotiations, and fostering sustainable development.

The Maldives has also been active in various global forums, advocating for action on climate change, and hosted the Small States Conference on Sea Level Rise in 1989, the first of its kind. The key idea to emerge from this conference was the need for small states to work much more closely together and to form common positions on issues of mutual interest. This subsequently was the bedrock on which the Alliance of Small Island States (AOSIS), formed in 1990 ahead of the first meeting of the Intergovernmental Negotiating Committee for a Framework Convention on Climate Change, which took place in Geneva in 1991.

In the past twenty-five years, Maldives, through national, regional and international efforts, has undertaken several initiatives and been an agent of change on a wide variety of issues related to climate change and environmental degradation.

Having taken over the chairmanship of AOSIS at the beginning of 2015, the Maldives has taken an enhanced leadership role in spearheading the concerns and needs of SIDS with regard to climate change and sustainable development. The Maldives will take advantage of the Paris Climate Convention in December of this year to work with all partners to ensure the adoption of effective and holistic decisions to address climate change. The Maldives believes that such an agreement should work to keep the increase in global temperatures target of limiting the rise in global temperatures to 2-degrees Celsius above pre-industrial times, a task that is essential to the survival of small island developing states.

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The waters of the Maldives team with over 1,000 species of fish

