



## Keynote Speech

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Bismillahir-Rahmanir-Rahim الرحيم الرحمن الله بسم

Excellences, Distinguished Delegates, Ladies and Gentlemen:

At the outset, let me first wish you with a warm welcome to Maldives. It's a pleasure to be with you all at this event.

Climate change is the biggest challenge to humanity in the 21<sup>st</sup> century. And the atoll nations are at the fore front of the climate change impacts.

The term "atoll" is derived from a Maldivian word "atholhu".

As it is common knowledge in this room, coral reefs are the essential life blood of atoll nations. They have been growing and shaping our islands for millions of years while experiencing multiple ice ages and natural climatic cycles.

The coral reefs were responsible for the current shape of atoll nations. These coral reefs have provided us with sand for the land, fish for food and filtered water for drinking, while protecting us from the waves.

Now coral reefs are at risk from climate change.

The Intergovernmental Panel on Climate Change (IPCC) report states with high confidence that coral reefs will decline by 70-90% even with an increase of 1.5 degree Celsius of global average temperature, compared to pre-industrial levels. With a 2 degree Celsius or more increase, the decline will be more like 99%. This will be a complete diminish. Can we imagine a reef without live corals? A dead reef will have significant and irreversible consequences on the islands. And this is under the most optimistic scenario. For a country that is made up of coral islands, this is a catastrophic scenario.

El Niño events have increased in frequency and occurrence since the 1970s. This weather anomaly brings about changes in thermal characteristics of the sea in the Indian Ocean. This occurred consistently between 1982-83, 1987-88 and 1997-98 with widespread coral bleaching in Maldives. In 1998 large areas of our shallow reefs were affected. It is estimated that 98% of shallow water corals died during this single bleaching event and some of them have still not recovered. The subsequent bleaching events of 2005, 2010, 2015 rolled back the recovery of the coral reefs even further.

Coral bleaching is not just occurring in Maldives. It has become a frequent event around the world.



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For a country that derives its main income from tourism, this means huge revenue loss. For a country that regards fisheries as a main source of livelihood and employment, this means major economic and social loss.

The loss of the coral reefs exacerbates the risks from other impacts of climate change. Coral islands are low lying islands at extreme risk from sea level rise. The average elevation of Maldives is less than 2m while 80% of land is below 1m. Even in the optimistic scenario by end of the century, global mean sea level is likely to rise by 0.28-0.61 meters. During extreme tide and wave conditions it would start inundating the islands even at the low end of the optimistic scenario. And that's excluding the contribution of glaciers. Our records show that in Maldives sea level is increasing at about 3 mm/yr for the past 30 years and is accelerating.

Inundation isn't the only risk from sea level rise. The limited ground water resources also became contaminated from saltwater intrusion. In Maldives we do not have surface water resources and our only natural source of water in the islands is rain and ground water.

Since 2004 we have been having water shortages in different parts of the country during the dry period. The recovery of ground water from that event is further hampered by swell events that seem to be occurring at an increasing frequency over the past two decades. There has been observable change in rainfalls patterns in Maldives. The Maldives goes through dry spells often with no rain, sometimes for as long as six months. The Government must produce, and safely transport the water to the islands. The geographical dispersion of the islands further exacerbates the severity of this problem. Similarly, it also increases the cost burden on the government. This reduces water security and soil fertility of the islands, further putting pressure on limited cultivable land in Maldives.

Thus, we exceedingly depend on imports. As small atoll islands, we rely heavily on our neighbors for essential services like staple food which we are unable to cultivate at required scale in the country. Our main staple food comes from South Asia, a region that is itself at high risk of climate change, especially for agricultural production. The impact on global food production has a direct impact on the nutrition, health and well-being of our populations.

There is one undisputed truth and that is climate change is real and we are going to be severely impacted by it. As atoll nations we must find a way to increase our resilience to climate change and its impacts. As indicated before the atoll nations have a unique geomorphology that itself has many challenges in terms of being resilient. Irrespective of the challenges we as elected officials have a responsibility to the people of our nations to keep them safe and provide them with basic necessities as well as opportunities to prosper.

And the first step of resilience is to understand the impact of climate change on our lives and our future. Domestically we have been investing heavily on projects that increase resilience of the communities. Most of our public sector investment are on resilience programs. This includes investments in coastal protection, water, sanitation, flood mitigation, and improved accessibility. We have also started utilizing an integrated approach to these projects for cost effectiveness, such as combining nature-based solutions with engineering solutions and traditional knowledge with modern technology.



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But there is still a huge gap in terms of resilience to climate change. It is estimated that proper coastal protection in Maldives could cost up to USD 8.8 billion. This is a significantly large amount, for country whose GDP is about USD 2 billion.

We are already investing what we can. However, domestic resources are simply not enough. Climate change is exerting undue pressure on our already vulnerable economy, which is heavily dependent on the environment and its natural resources. The Maldives with its limited resources and growing debt, coupled with geographic vulnerabilities, is unable to adequately finance our needs for climate adaptation

Financial resources that are available to the developing countries, especially to the SIDS are already very limited. Funds established to assist countries in special situations, which need additional help are running empty. Funds that are available, are further limited. The process of application for finances are complex, long and cumbersome. The climate change impacts are accelerating, and we need to accelerate our efforts to resilience. And we need access to financing that match those efforts.

Thus, we look at our development partners like ADB, to help us with this predicament and assist in our quest for climate resilience.

Thank you.