The Senior Officials meeting of the Small States Conference on Sea Level Rise continued into its second and final day with further presentations by international resource persons and the preparation of a Draft Declaration to be considered at the Ministerial Meeting scheduled to commence tomorrow.

Three sessions were held: one on the Effects of Sea Level Rise on Resources, the second on Perspectives for the Future, and the third and final session was devoted to the preparation of the Draft Declaration of the Small States Conference on Sea Level Rise.

Dr. Colin D. Woodroffe of the Department of Geography, University of Woollongong, Australia, gave a presentation on “Salt Water Intrusion into Ground Water: An Assessment of Effects on Small Islands States Due to Rising Sea Level”. He explained that, at present, it was not clear as to what rate the sea level is changing and, further, at what rates it was likely to change so as to effect the low lying islands which comprise of many different categories. As such, the responses of these islands to the sea level rise also remain unclear. However, he stated that the threat of sea level rise and impacts on groundwater resources, will be felt most on the low-lying reef-top islands and the reef islands of coral atolls. He emphasised that the impact of sea level rise is only one of the consequences of climatic change that had been predicted as a result of Greenhouse effect in the atmosphere. Other consequences may include increased rainfall, increased hurricane range and frequency. In view of these uncertainties, he stated that there was a need for more fundamental research to be undertaken, make good assessment of available resources, and monitor the changes. Organised baseline studies of water level, salinities in wells and shoreline position are the only yardsticks against which future changes can be reliably assessed, he said.

At the request of Dr. Woodroffe, Professor P. Holmes of the Imperial College, London made a short presentation which added a further dimension to the topic of coastal management strategies. He highlighted the need to consider the potential influence of a rising mean-sea-level in the context of other factors which contribute to coastal erosion and flooding, particularly storm surges and wave conditions.
Mr. James Titus of the U.S. Environmental Protection Agency, spoke on the implications of the sea level rise expected over the next century. After highlighting the interaction of the effects with human activities he discussed ways in which the Republic of Maldives might respond to the problem. Mr. Titus further stated that even though a substantial rise in sea level is still decades away, many researchers and policy makers have concluded that the long-term nature of major development decisions simply that we must factor sea level rise into many of today's activities.

Dr. John Pernetta, Chairman of the Association of South Pacific Environmental Institutions, spoke on the potential impacts of climatic change and sea level rise in the South Pacific Islands. He explained that geographically, the islands of the Pacific basin fall into four major types and the range and magnitude of climatic and sea level rise impacts of these would vary. Climatic changes would affect rainfall patterns, agricultural productivity and soil fertility, he said. Sea level impacts include inundation, increased flooding, saline intrusion into estuaries, and economic impacts in terms of capital investment and infrastructure, power demand and supply, inter-island and inter-country migration and loss of cultural heritage. He called for global action and advocated the application of the “polluter pays” principle since small states, in general, and archipelagic states, in particular, may well suffer major impacts as a consequence of deeds to which they have not contributed.

Maldives contributed to the discussion on the session on Perspectives for the Future through presentations by Mr. Maizan Hassan Maniku of the Marine Research Section of the Ministry of Fisheries and Agriculture and Mr. Mohamed Ali of the Ministry of Planning and Environment. Mr. Hassan Maniku emphasised the global nature of the atmosphere and the need for international collaboration at all levels in order to effectively address the problems of sea level rise and atmospheric change. He also indicated possible research areas requiring special attention. Mr. Mohamed Ali said that the topography, size and setting of the islands made Maldives one of the most fragile ecosystems to climatic change.

Dr. Alasdair J. Edwards from the University of New Castle-upon-Tyne presented a paper on strategies for the future and the importance of coastal zone management in the context of sea level rise. He outlined various scenarios for sea level rise including a consensus scenario. Dr. Edwards said that it would be expensive to defend islands, especially long and narrow islands, but concluded that if coral reefs can be managed properly, they might grow and accumulate sediments to keep up with the sea level rise. Taking the Maldives as a case study, he emphasized the need for manpower development programmes, environmental data base, coastal zone management legislations, public awareness programmes and research activities.