



Designating the Caribbean Sea as a Special Area

Professor John Agard, Expert, Caribbean Sea Commission,
University of the West Indies

In the rich diversity of cultures and nations making up the region, the one uniting factor is the marine ecosystem on which each ultimately depends

The ACS has the political responsibility for advancing a Resolution at the United Nations General Assembly (UNGA) to have the Caribbean Sea designated as a Special Area in the context of Sustainable Development. The scientific arguments for the designation arise from the Caribbean Sea Ecosystem Assessment Project (CARSEA) and were presented at the UNGA by a delegation jointly headed by the Honourable Donville Inniss, Minister of State in the Ministry of Foreign Affairs, Barbados and HE Luis Andrade Falla, Secretary General of the ACS. The Mission was supported by UWI Scientists Professor John Agard and Professor Robin Mahon. The outcome is that at the end of 2008 the United Nations General Assembly adopted at its 65th Session a Resolution: "Towards the sustainable development of the Caribbean Sea for present and future generations." The Resolution is accessible on the ACS website. A synopsis of the argument for the Resolution follows.

The peoples of the Caribbean are defined by the Sea whose shores they inhabit. In the rich diversity of cultures and nations making up the region, the one uniting factor is the marine ecosystem on which each ultimately depends. If that ecosystem is under threat, so are the livelihoods of millions of people. The economic activity of the Caribbean is based to a very great extent on the bounty of the Sea and the natural beauty which attracts visitors from around the world – which in turn require the healthy functioning of complex physical and biological processes. The coral reefs and the seagrass beds, the white sand beaches and the fish shoals of the open ocean: these are natural capital assets whose loss or degradation has huge implications for the development of the region.

Apart from the economic importance of the ecosystem, it shapes the lives of all the inhabitants of the Caribbean in ways which defy statistical analysis. The Sea and its coasts form the stage on which the cultural, spiritual and recreational life of the region is played out. It may be united by its sea, but the Caribbean region is

divided by its history. Five hundred years of settlement by Europeans, Africans, Asians and people from other parts of the Americas has bequeathed to the region a patchwork of independent states and numerous colonies administered by governments in a different hemisphere. This presents unique challenges to the establishment of the cooperative policies needed to manage this ecosystem for the common good, and to achieve the most secure long-term future for the Caribbean peoples.

The situation is made even more complex by the impact of decisions on the ecosystem of the Caribbean Sea. These decisions are usually made in parts of the world with no direct territorial link to the region: From the use of the waters for fishing by Asian fleets and by international shipping, including the transport of nuclear waste en route to the Panama Canal and oil shipments from the Middle East to refineries in the Gulf of Mexico; to the pollution and sediments carried by rivers from deep inside the South American continent; and even the energy choices of societies throughout the world which have major implications for the Caribbean Sea, particularly in light of the threat of global warming. These complex factors combine to create an urgent need for a new partnership between the international community and Caribbean Sea countries to secure a sustainable future for Caribbean peoples while respecting international norms and conventions.

Four major global scientific integrated environmental assessment processes initiated or funded by the UN have recognised the central importance of the natural resources of the Caribbean Sea to the economic and social well-being of its peoples. These assessments have also recognised that the sustainability of the services provided by these resources is threatened by damaging human-related activities. For example, the Global International Waters Assessment (GIWA) completed in 2006 did a diagnostic of the reasons for the degradation of the Caribbean Sea and identified the main drivers of ecosystem degradation as coastal land



use change, pollution and over-exploitation of natural resources. The Millennium Ecosystem Assessment (MA), completed in 2007, and a further sub-global component called the Caribbean Sea Assessment (CARSEA) both assessed the major ecosystem services which contribute to human well-being. Caribbean Sea fisheries were determined to be worth more than US\$1 billion (bn) per annum while the Caribbean was shown to be the most dependent region in the world on tourism. This assessment highlighted the lack of integrated management as a major driver of change and recommended the formation of Caribbean Sea Commission to deal with the problem.

The Inter-governmental Panel on Climate Change (IPCC) completed its main reports in 2007 and highlighted the particular vulnerability of the small islands of the Caribbean and low lying states of Central America to extreme events and disasters as well as sea level rise and coral bleaching. The attendant loss of resources from climate change was projected to have a significant effect on among other things amenity value of the region for tourism. The Global Environmental Outlook 4 (GEO4) launched at the UN in 2007 further confirmed that effects such as climate change add to the already serious longstanding problems such as degraded coasts and polluted seas.

Three key messages can be highlighted from these assessments. First, some of the vital services which human communities derive from the Caribbean Sea ecosystem are being placed in jeopardy, often by the very activities and industries whose long-term future depends on the continuing provision of those services. Second, a reduction in the stresses being placed on the natural functions of the Caribbean Sea will require new ways of working together amongst the disparate political authorities making up the region. Finally, the combination of dependence on the integrity of its marine ecosystem and vulnerability to global forces beyond its control puts the Caribbean in a special position, which merits recognition and concrete action by the international community.

The Sea and its people

The semi-enclosed Caribbean Sea Large Marine Ecosystem (LME) is a distinct ecological region, bounded to the North by the Bahamas and the Florida Keys, to the East by the Windward Islands, to the South by the South American continent, and to the West by the isthmus of Central America. Covering an area of more than 3.2 million km², it is the second largest sea in

the world, after the Mediterranean. The Caribbean Sea is however special when compared to all other Large Marine Ecosystems (LME) in that it has the largest number of countries surrounding it in the world. Further, the disproportionate number of maritime boundaries imposes special challenges with regard to governance of the living resources of the maritime space.

The Caribbean, home to more than 116 million people, is divided among 22 independent states, of which nine are continental countries of South and Central America, and the remainder, islands and archipelagos. In addition, four colonial powers – the United States, the United Kingdom, France and the Netherlands – still exercise political control over 11 island territories in the region. The complex political structure, produced by the historic struggles for control of the resources of the Caribbean, and reflecting a wide cultural diversity arising from that history, has left the region with a series of overlapping regional authorities exercising varying degrees of policy coordination over parts of the Sea. This creates a significant problem in the exercise of a holistic approach to the management of the Caribbean Sea ecosystem.

What unites the people inhabiting this region is a common dependence on two particular products of the marine ecosystem, referred to as ecosystem services. These are tourism and fishing. Both activities strongly illustrate the interdependence of human well-being, economics and the environment within the context of sustainable development.

Are people in the Caribbean more dependent on tourism and fishing than other seas of the world? A few facts and figures help to justify why the Caribbean Sea is special in the context of sustainable development.

Tourism in the Caribbean is based on the high

A reduction in the stresses being placed on the natural functions of the Caribbean Sea will require new ways of working together amongst the disparate political authorities



The loss or degradation of marine species has huge implications for the region



Environmental degradation is undermining development and threatens future development progress. More effective integrated policy responses are needed

amenity value of its ecosystems. According to the World Tourism and Travel Council's (WTTC) assessment of the 14 major tourism regions of the world, relative to its size, the island population of the Caribbean is more dependent on income from tourism than that of any other part of the world. In 2004, more than 2.4 million people were employed either directly or indirectly in travel and tourism, accounting for 15.5 per cent of total employment, a proportion nearly twice as high as the global average. The sector contributed US\$28.4 bn to the Gross Domestic Product, 13 per cent of the total, and US\$19 bn or 16 per cent of exported services and merchandise. Over one-fifth (21.7 per cent) of all capital investment was linked to tourism, well over twice the global average. On several islands tourism accounts for more than 90 per cent of GDP. The Wider Caribbean also has even more tourist visitors than the Small Island Developing States (SIDS), especially the Central American countries such as Mexico (Cancun and Cozumel) as well as Costa Rica. Twenty-five million tourists choose to holiday in the Caribbean each year, largely in pursuit of a dream of sensuous relaxation shaped by its natural features – palm-fringed beaches, blue-green lagoons with crystal-clear water, opportunities to see multi-coloured fish swimming amongst coral reefs. Dependence on tourism, therefore, also implies dependence on the capacity of nature to continue providing the conditions which make the Caribbean such a popular destination. In cases such as the diving industry, this connection is so close that degradation of ecosystem quality can be measured directly in lost income. Since tourism is the main economic activity of most of the Greater Caribbean States and the Caribbean Sea is recognised by the ACS Member States and Associate Members as a common asset and a potential unifier in their development, the Leaders of the ACS signed the Convention Establishing the (STZC): the Sustainable Tourism Zone of the Caribbean, in December 2001. The Sustainable Tourism Zone of the Caribbean will expand as a network of communities and countries committed to ensuring that tourism is not only providing economical benefits, but that these benefits are reaching all levels of the population, enhancing the protections of the natural and cultural values, today and in the future.

The process to select and evaluate destinations to become part of the STZC is one of the main projects being implemented. The objective is to further develop the sustainable tourism indicators as identified in the Convention and to create practical tools for destinations'

managers to monitor the sustainability of the tourism sector in their areas. The indicators in the STZC Convention can be categorised as: social, economic and environmental indicators. Five destinations have already been evaluated in the Pilot Phase. Seven other destinations are currently being evaluated.

Fishing is also a significant provider of jobs and income in the Caribbean. It is estimated that more than 200,000 people in the region are directly employed, either full-time or part-time, as fishers. In addition, some 100,000 work in processing and marketing of fish, with additional job opportunities in net making, boat building and other supporting industries. Assuming each person employed has five dependents, more than 1.5 million people in the Caribbean rely for their livelihood on commercial fishing. The activity also brings in approximately US\$1.2 bn annually in export earnings, with the United States the principal destination. However, the true importance of fishing is not fully reflected in these figures. In a region where most of the population has access to the Sea, fish provide a vital resource for poor communities in ways which do not always appear on the national accounts. It is estimated, for example, that fish products account for seven per cent of the protein consumed by people in the Caribbean region. Anything which damages the productivity of the marine food chain is therefore a significant threat both to the health and to the wealth of these societies. A number of factors set the Caribbean apart and present particular problems in protecting fish stocks for future generations. One is the sheer variety of fish and invertebrates involved in commercial fishing. This makes it extremely difficult to monitor and manage the stocks sustainably. Another problem arises from the lack of an agreed regional regime with responsibility for the resources of the Caribbean. Existing arrangements enable fishing fleets from throughout the world to engage in a 'free for all', placing added pressure on the marine life of the Sea.

In summary, there is evidence that environmental degradation is undermining development and threatens future development progress. These studies illustrate that Millennium Development Goal 7, Environmental Sustainability, is critical to the attainment of the other MDG goals and that more effective integrated policy responses are needed at all levels of governance. The ACS has led the formation of the Caribbean Sea Commission to begin dealing with these issues. ■

Bibliography: CARSEA (2007). Caribbean Sea Ecosystem Assessment (CARSEA). A sub-global component of the Millennium Ecosystem Assessment (MA). J. Agard, A. Cropper, K. Garcia Eds. Caribbean Marine Studies, Vol. 8:1-85