

## **Sustainable Oceans: Sustainable Tourism in the Context of the Green Economy and the Eradication of Poverty**

*Task: “content concise and laying out the major issues or overarching paths for the way forward, with examples where possible” target length four pages<sup>1</sup>*

In the context of Sustainable Oceans tourism is best understood as land based tourism in the coastal zone, recreational activities (which may involve residents and tourists) in inshore waters and coastal and ocean based cruising.

Traditionally, in many societies, the sea and the shoreline have been regarded as part of the public realm, as common property resources with open access. The development of larger settlements along the coasts, away from traditional ports and harbours, has resulted in conflicts over access to beaches and the sea as developers have sought to privatise the shoreline for exclusive use by particular resorts, hotels and other forms of accommodation. The seas and oceans beyond the traditional territorial waters, subject to national regulation, have been global commons subject to only limited international regulation through treaties and the International Maritime Organisation. Antarctica, where tourism has been growing rapidly, presents particular challenges as jurisdiction resides with the treaty states.

The majority of the impacts of tourism in the coastal areas occur within national boundaries in the coastal zone on land or in the territorial waters and are within national jurisdictions, there may also be regional treaty or inter-governmental agreements which also apply to particular seas<sup>2</sup> and associated water catchment areas. In small island developing countries tourism in the coastal zone is of major importance, for want of development alternatives and because of the large proportion of the islands which is coastal.

As work by UNWTO and the WTTC has demonstrated tourism demand, and the growth of tourism, drives a major part of the world economy and tourism therefore drives demand for electrical batteries, plastic packaging, construction and a very wide range of products many of which contribute to marine pollution. In the literature most of the focus is on international tourism and in particular on those tourists who migrate to the sun, often in the developing world, for a holiday. Policymakers need to recognise that economic development and growth in the emerging markets and the BRIC counties has resulted in a very rapid growth in domestic tourism much of it to the coast. Most tourism remains intra-regional.

The rapid development of coastal tourism has led to fierce competition between destinations for sun, sand and sea tourism and some destinations – for example UK seaside resorts and the Spanish Costas – have declined as tourists have been attracted elsewhere by newer resorts with better facilities, competition often is so intense that insufficient return is achieved to ensure the maintenance of the fabric of the resorts and accommodation.

In some significant originating markets the coastal zone has been regarded as a social space where people are given license to dress in a more revealing way than is considered acceptable away from the beach, and to behave in ways which would be less acceptable elsewhere. Conflicts about appropriate behaviour and dress in the coastal zone arise where there are significant differences of acceptable behaviour between visitors and local communities. This can be acute where cruise ship tourists are discharged ashore, the distance between the bar or sun lounger and the mosque, temple or cathedral may be uncomfortably short.

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<sup>1</sup> We are asking you to provide content on responsible tourism for Section II of the outline. There is no firm page limit for the various sections, but we are thinking 3-4 pages will allow for coverage of the content noted in Section II.

<sup>2</sup> The Mediterranean Sea, the Baltic Sea Area, the Black Sea Area, the Red Sea Area, the Gulfs area, the North Sea, the Wider Caribbean Region and the Antarctic Area

## **Sustainable Oceans: Sustainable Tourism in the Context of the Green Economy and the Eradication of Poverty**

Climate change is in part driven by tourism, greenhouse gas emissions cause coral bleaching, ocean acidification, and sea level rise and marine life begins a process of migration caused by changes in average sea temperatures. Climate change is also a major risk factor for coastal tourism. Fossil fuel consumption in the tourism sector is a substantial contributor to climate change. According to UNWTO, UNEP and WMO (2008), emissions from tourism (including transports, accommodation and activities) account for about 5% of global CO<sub>2</sub> emissions and up to 12.5% of global radiative forcing, i.e. the warming caused by CO<sub>2</sub> and other greenhouse gases. Most of this (approximately 75%) is caused by transport, and in particular aviation (Scott et al. 2010).

Seismic activity in the sea bed or on the shore line can cause major damage and loss of life in the coastal zone as has been demonstrated by the recent tsunamis. Coastal zone development for tourism with consequent changes in population density and physical changes in topography and shore habitat and sea level rise has contributed to exacerbating the impacts as does any rise in sea levels associated with climate change.

Development in the coastal zone is driven by proximity to the sea; this increases its vulnerability both to extreme weather and seismic activity. For example corals are vulnerable to ocean acidification, coral bleaching, and for those coral reefs located close to shore, greater land run-off and potential pollution as a result of increased storm events.<sup>3</sup>

UNEP has estimated that in a Business as Usual (BAU) scenario up to 2050, tourism growth will imply increases in energy consumption (111 per cent), greenhouse gas emissions (105 per cent), water consumption (150 per cent), and solid waste disposal (252 per cent). To do nothing is not an option.<sup>4</sup>

### ***Coastal Zone***

Tourism is a significant driver of coastal zone development but it is not the only cause. Tourism contributes to significant change in the coastal zone by creating demand for resorts, condominiums, second and retirement homes, caravan parks and campsites, and recreational facilities. There is significant pressure to be close to the sea, where planning regulations are broken, buildings and other structures are rarely demolished. Tourism also contributes to the demand which leads to the development and expansion of ports. This demand often inflates land values and may lead to the displacement of local people by market forces or by decree in order to clear land for development.

In the coastal zone tourism creates both direct employment opportunities in tourism businesses and in the supply chain. There are livelihood opportunities through employment and micro-enterprises in the supply chain – in sales of locally produced goods and services to tourism businesses and directly to tourists.<sup>5</sup>

Development in the coastal zone has a wide range of negative environmental impacts including sewage and solid waste pollution, oil and fertilizer/pesticide (nitrification) pollution of coastal waters, habitat damage, groundwater depletion and salt water incursion and changes in sediment loads from storm water runoff and coastal erosion which may be exacerbated and accelerated by coastal zone development where it contributes to coastal erosion.

Construction in the coastal zone can lead to the destruction of dune systems, mangrove clearing, dredging, dynamiting and sand removal and beach cleaning may destroy its habitat value for coastal and marine life.

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<sup>3</sup> Hughes, T.P., Graham, N.A.J., Jackson, J.B.C., Mumby, P.J. and Steneck, R.S. (2010) 'Rising to the challenge of sustaining coral reef resilience', *Trends in Ecology and Evolution*, 25: 633-642.

<sup>4</sup> UNEP (2011) **Green Economy in a Blue World, Marine & Coastal Tourism** in press

<sup>5</sup> See for example initiatives by ST-EP, the Travel Foundation and DFID on tourism and poverty reduction in the coastal zone.

## **Sustainable Oceans: Sustainable Tourism in the Context of the Green Economy and the Eradication of Poverty**

The coastal zone is not homogenous and the management challenges vary by habitat. In the coastal zone there are beaches, mangroves, dune systems, lagoons, salt ponds, estuaries, marshes and swamps, fringing reefs, each poses specific conservation and sustainable use management challenges for tourism, recreational, fishing and other gathering activities. The building of seawalls to trap sand can have unpredicted and deleterious impacts on the distribution of sand.

Planning is rarely undertaken primarily for tourism, although tourism master planning can by scheduling land for tourism development, increase development pressure and land speculation. Reactive planning, the primary form, is generally unable adequately to cope with ad hoc development pressure. There is a large body of academic and policy literature and experience of efforts at Integrated Coastal Zone Management (ICZM). The concept of ICZM itself recognises the complexity of managing the natural environment and human activity in the coastal zone and the range of agencies public and private, regulatory and market oriented which need to be engaged. Successful ICZM requires that multiple ministries and agencies are effectively engaged and that appropriate policy is implemented and enforced.

At the heart of ICZM are the disciplines of planning and land use planning in particular, and the management of construction. Most countries have regulations on construction and abatement from the mean high water mark, but developers seek to get as close as possible to the water – and then look to government to enhance sea defences where their assets are threatened. There are a range of regulatory instruments available, laws, incensing, permits (some tradable) and standard, often the policy frameworks exist but enforcement is weak. Improved regulation of siting and design and building controls are necessary if tourism development in the coastal zone is to become more sustainable. A number of countries, including the Nederland and the UK, are now implementing managed retreat strategies in the coastal zone. It may be more effective to use the language of resilience.<sup>6</sup>

Lax planning regulations and poor enforcement can result in coast lines being urbanised with consequent loss of habitat and biodiversity and changes which diminish the tourism and recreational value of destination.

Environmental Impact Assessments are generally required for major new developments but may not be required for smaller scale development, which cumulatively may have larger impacts than major new resorts.

### ***Inshore waters***

Recreational uses are varied in their scale and impacts, yachting, surfing, wind surfing, snorkelling, scuba diving, for consumptive and non-consumptive recreation, and sport and deep sea fishing. In addition to the impact of consumptive tourism, there is also anchor damage to sea grass beds and corals and boat grounding, litter, spearfishing, diver and snorkeler damage and trampling to be considered. There has been considerable growth in whale and other cetacean viewing from shore and boat, the latter potentially far more damaging to marine wildlife, swimming with dolphins and shark diving, all of which need to be strictly regulated if permitted at all.<sup>7</sup>

Marine Conservation Areas, like national parks, offer the potential to meet both conservation and recreational/tourism objectives, with the latter contributing to funding the former. There is some evidence that

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<sup>6</sup> CoaST in Cornwall has been very successful with this approach. <http://www.coastproject.co.uk/>

<sup>7</sup> There are some estimates of the value of these recreational activities: Cisneros-Montemayor, A. M., & Sumaila, U. R. (2010). A global estimate of benefits from ecosystem-based marine recreation: potential impacts and implications for management. *Journal of Bioeconomics*, 12(3), 245-268; Hoyt, E. (2001). *Whale Watching 2001: Worldwide Tourism Numbers, Expenditures and Expanding Socio Economic Benefits*. Yarmouth Port, MA, USA: IFAW. Orams, M. (1999). *Marine tourism: Development, impacts and management*. London: Routledge.

## **Sustainable Oceans: Sustainable Tourism in the Context of the Green Economy and the Eradication of Poverty**

international divers may be willing to pay user fees, however to what extent this is sufficient to fund Marine Conservation Areas is not clear.<sup>8</sup> Accidental importation of exotic species is a particular challenge.

### ***Ocean-based***

There is a consensus in the literature that the majority of marine pollution results from shore based activity. Shipping and other sea based activity is thought to account for around 20% of marine pollution. At December 2010 the International Maritime Organisation reports a world sea going fleet in 103,392 ships registered in over 150 nations. There was in 2007 a world fleet of 100,243 ships, of which 6,912 (6.9%) were passenger ships, 4% of the world fleet by gross tonnage. The cruise industry is highly concentrated. The CLIA is composed of 26 of the major cruise lines serving North America and reports that in 2008, 13.05 million people worldwide took cruise vacations, a 4% increase over the previous year.<sup>9</sup>

International shipping was estimated to have emitted 870 million tonnes, or about 2.7% of the global emissions of CO<sub>2</sub> in 2007.<sup>10</sup> There are a number of steps which can be taken by cruise lines to reduce greenhouse gas emissions including new engines, retrofitting, "sky sails", anti-fouling paint, and itinerary planning to reduce speeds and to travel with, rather than against, the tides and currents.<sup>11</sup>

Cruising contributes to marine pollution through the discharge of sewage, grey water (wastewater from sinks, showers, galleys and laundry is likely to contain detergents, cleaners, oil and grease, metals, pesticides and medical waste); oil and bilge water (fuel, oil, oily water, on-board spills collected in the bilge located in the bottom of the cruise ship's hull) and hazardous wastes: toxic chemical waste from dry cleaning, photo processing, paint and solvents, batteries, fluorescent lamps and other sources; solid Wastes (plastic, paper, wood, cardboard, food waste, cans or glass); and air pollution, this is regulated through the IMO<sup>12</sup> and by port authorities which can regulate ship emissions in port.

The regulation of ships at sea, including cruise ships, is undertaken by the International Maritime Organisation – changes in the regulation of marine fuel south of 60° will assist in regulating the size of ships visiting Antarctica and the potential damage to the region.

Garbage disposed at sea endangers fish and marine mammals and birds through ingestion and through ensnaring, it can take very substantial periods of time for rubbish to degrade at sea and some of it washes ashore polluting beaches and inshore waters.<sup>13</sup> Annex V of the MARPOL Convention totally prohibits of the disposal of plastics anywhere into the sea, and severely restricts discharges of other garbage from ships into coastal waters and "Special Areas". The Annex also obliges Governments to ensure the provision of reception facilities at ports and terminals for the reception of garbage.

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<sup>8</sup> White and Rosales (2003) reported that most local and about 80% of foreign divers were willing to pay user fees for diving in the Philippines, with up to US\$9 per person per trip.

<sup>9</sup> <http://www.cruising.org/regulatory/about-clia>

<sup>10</sup> B p. 1

<sup>11</sup> Maersk reports having achieved savings in fuel consumption and emissions of 30%.  
[www.guardian.co.uk/environment/2010/jul/25/slow-ships-cut-greenhouse-emissions](http://www.guardian.co.uk/environment/2010/jul/25/slow-ships-cut-greenhouse-emissions)

<sup>12</sup> Annex VI of the MARPOL Convention, which entered into force in 2005, sets limits on SO<sub>x</sub> and NO<sub>x</sub> emissions from ship exhausts and prohibits deliberate emissions of ozone depleting substances.

<sup>13</sup> <http://www.imo.org/OurWork/Environment/PollutionPrevention/Garbage/Pages/Default.aspx>

### Poverty and local economic development

Displacement of communities and traditional activities in the coastal zone increases the costs for communities in time and effort to harvest food and other resources from the shoreline and the sea, and may deny access. Where this occurs communities are often impoverished, although there are examples where fishermen have engaged in recreational fishing or taken to providing ferry and boating services for tourists and other recreational users. This may require intervention to assist local community members to engage in the sector. There may also be opportunities for fishermen to secure higher prices for their catch if they can sell directly to hotels and restaurants or directly to tourists, improving their livelihoods. Limited work has been done in the coastal zone to increase livelihoods through improving access for the economically poor to the tourism sector, both tourism businesses and tourists.<sup>14</sup>

The collection and sale of marine biodiversity as craft items and souvenirs is potentially lucrative but it is also destructive.

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<sup>14</sup> See for examples Bah & Goodwin and Ashley et al 2006

## **Sustainable Oceans: Sustainable Tourism in the Context of the Green Economy and the Eradication of Poverty**

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