Fact Sheet #5: Water & Tourism

Competitive and Sustainable Tourism in Sinaloa Sur

Overview: Global Tourism, Coastlines, and Sinaloa

Just 3% of the Earth's water is fresh and approximately 70% of this water is frozen in the polar ice caps (Stockholm International Water Institute - SIWI). Water is a finite resource – it is impossible to increase the amount of fresh water on our planet. However:

- Global water use has tripled in the last 50 years;[1]
- Demand for water is growing at twice the rate of the world's population;[2]
- Demand for water exceeds available supply from sustainable sources in a growing number of tourist destinations;[3] and
- Climate change is expected to account for about 20% of the global increase in water scarcity this century (2050 Project).

While no specific data is collected nationally on the consumption of water by the tourism sector, international tourism is estimated to account for less than 1 per cent of national water use.[4] However, water consumption has become increasingly important in tourism planning and development worldwide, and is particularly critical along coastlines where rapid growth of tourism often leads to conflicts over water scarcity and water equity (UNWTO 2012).

- In 17 coastal and island destinations in the Caribbean and Mediterranean regions, the "demand for water exceeds available supply from sustainable sources thus leading to water shortages."[5]
- In Jamaica, each tourist uses 4 to 10 times more water daily than each local resident. In the Mediterranean, a tourist uses 1.5 to 2.5 times more water per day than a local resident.[6]
- A tourist uses from 84 to 2,000 liters of water per day, depending on length of stay, size and amenities in the hotel, type and amount of food consumed, and other factors.[7]
- Globally, the world's 32,000-plus golf courses use an estimated 9.5 billion liters of water per day to irrigate their greens.[8] An average golf course in Spain uses as much water as a town of 12,000 people.[9]

In Mexico, 17.1% of renewable water resources have already been exhausted.[10] In the Yucatan Peninsula, rapid urbanization and unregulated tourism development "is both straining and causing the contamination of freshwater supplies by untreated waste, and tourism water consumption in relation to water availability …. is becoming more severe."[11] In the case of Marismas Nacionales, Sinaloa, both a RAMSAR and Biosphere Reserve site, there are plans to build a hydroelectric dam on the San Pedro Mezquital River, the main tributary for the mangroves in the reserve. If the dam is built it will decrease the volume and quality of freshwater flow and sediments and increase salinization, according to a study led by Manuel Blanco, from the Multidisciplinary Center of the Autonomous University of Nayarit (UAN).[12] This situation is further compounded by the proposed construction of tourism infrastructure at Playa Espiritu and the current consumption of water by the agricultural, shrimp and fisheries sectors. Without careful planning, water conflicts will become more intense.

Bad example:

Bali, Indonesia: "Bali is an important case study, because 80 percent of its economy depends on tourism and tourism depends on a healthy [fresh] water supply, which uses 65% of the island's fresh water resources", according to Dr. Stroma Cole.

- The tourism sector employs 25% of the work force providing 481,000 direct jobs and contributes 30% of Bali's GDP. However, it is estimated that 85% of the tourism economy is in the hands of non-Balinese;
- Tourism and agriculture are the sectors that together compete the most for water, and the distribution of water is skewed from agriculture to tourism, thus generating inequitable shares between tourists and locals;

- Golf courses in Bali use 3 million liters of water every day, while over half the population -- 1.7 million of the island's 3.9 million residents -- have inadequate access to clean water. Some villagers have to walk up to 3 kilometers to collect water from a well. Conflicts over water-use are growing, especially at the village level. [13]

THE UNITED NATIONS RECOGNIZES THE IMPORTANCE OF THIS THEME

Good examples:

Water and energy, along with salaries constitute the top expenses at most hotels. By instituting water use and conservation management plans and installing water-efficient fixtures, hotels can reduce indoor water consumption by 30 per cent and outdoor water consumption by up to 45 percent.[14]

- Holiday Inn in Flinders, Australia, recouped its USD $19,500 investment in low flow technology after only 18 months and cut its water usage by 50%.[15]
- Soneva's two luxury resorts, one in the Maldives and the other in Thailand, have the priority to obtain their water from sustainable sources: no water is taken from the public water supply with 60% coming from rainwater collection or wells and 40% from desalination.[16]
- Starwood Hotels have committed to reduce water consumption by 20% by 2020. All hotel brands owned by Starwood in the U.S. offer a $5 voucher to spend in the shop / restaurant / bar if guests don't have their room cleaned every day.[17]

Water use planning in Sinaloa Sur and ways to move forward

- Access to clean water is a basic human right recognized by the United Nations General Assembly.[18] It is essential to ensure that coastal communities have adequate supply of clean water;
- The catchment for all fresh water tributaries and aquifers that maintain the ecological balance of the Marismas Nacionales requires protection at all costs;
- All future tourism developments planned for Sinaloa Sur, especially along its coastline, must account for both current water use inventories and predictions of future climate change impacts. River Basin Councils, like those from Northern Sinaloa, should be created and should apply integrated water resources management to balance water use between tourism and Sinaloa's other industries. This is crucial to minimize the negative effects of climatic variability, and to make water use sustainable;[19]
- Tourism developments must have sufficient infrastructure and monitoring systems in place for conserving and managing potable water, sewage treatment (preferably tertiary treatment), untreated local wastewater, and final deposition of solid and liquid waste;
- Water tariffs need to reflect accurately the real cost of service provision and maintenance. This will ensure that water use by the tourism sector is compatible with the water requirements of the destination community i.e., meet tourists' expectations and satisfy local residents' livelihoods;
- Enforceable policies and legal frameworks should be in place to regulate and monitor water and energy use
- Tourism enterprises (especially hotels) should be given incentives to adopt water management, energy conservation, and waste reduction strategies. These best practices are available through the International Tourism Partnership's (ITP) Environmental Management Manual for Hotels available in ITP's www.greenhotelier.org.

RESOURCES

[1] CDP Water Disclosure Global Report 2012.
[2] Idem
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[5] Tapper, Richard, et al, (2011) ", p. 27.
[6] Richard Tapper, et al, p. 20.
[7] Gössling et al., 2012.
[8] Gössling et al, 2012.
[9] Lucia de Stafano, "Fresh Water and Tourism in the Mediterranean," WWF, July 15, 2005.
[10] Gössling et al, 2012.
[11] The Travel Foundation, 2011.
[12] Cárdenas, Guillermo. "Tesoro Ecológico en Riesgo. Los Manglares de Marismas Nacionales". *Revista de Divulgación de la Ciencia de la UNAM "Como Ves? Número del Artículo 156*. Retrieved from http://www.comoves.unam.mx/numeros/articulo/156/tesoro-ecologico-en-riesgo-los-manglares-de-marismas-nacionales
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[14] Gössling et al., 2011).
[15] Retrieved from www.greenhotelier.org.
[16] Idem.
[17] Idem.
[18] United Nations, July 28, 2010. http://www.un.org/apps/news/story.asp?NewsID=35456#.Uh0lUj_Y1ac
[19] www.consejosdecuenca.org.mx

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