

Tourism Sector Responds To Water Challenges to Protect Our Common Future

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INTRODUCTION

This year's World Tourism Day (WTD) theme is an attempt by the United Nations World Tourism Organization (UNWTO) to draw the attention of the tourism sector and the world at large to the important role the tourism sector is expected to play in response to water challenges. This year's celebration also offers the tourism sector the opportunity to highlight the measures currently being undertaken to contribute towards achieving sustainability in fresh water supply. The UNWTO Secretary General-Taleb Rafai in his official message for WTD 2013 says "as one of the largest economic sectors in the world, it is the responsibility of the tourism sector to play a leadership role and ensure that companies and destinations invest in adequate water management throughout the value chain". He adds that if fresh water is "managed sustainably, tourism can bring benefits to the national and local communities and support water preservation". He urges all those involved in the tourism sector to join the Global World Tourism Day campaign and continue to devise innovative solutions to ensuring sustainable access to water resources worldwide"

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This year's WTD theme is in line with the international year of co-operation for water proclaimed by the General Assembly of the United Nations during the international Decade for Action; "water, source of life (2005-2015) in order to highlight" that water is critical for sustainable development, especially for environmental integrity and eradication of poverty and hunger; it is essential for the health and well-being of human beings and is fundamental to achieve the Millennium Development Goals (Pontifical Council, 2013).

The responsibility to protect the earth's fresh water is everybody's concern. Water is becoming scarce with moderate to high water shortages and it is predicted that by the year 2030 the shortage will affect almost half of the world's population and as demand is likely to exceed supply by 40%" the UN statistics revealed (Farley, 2013). About 780 million people in the world do not have access to clean water and 2.5 billion do not have access to adequate sanitation due to water scarcity. It is predicated that water stress and scarcity is likely to be exacerbated by pollution and climate change. Population growth is also a key driver of water demand.

The import of this year's WTD theme is the creation of awareness of the role tourism plays in protecting our common future through water preservation and conservation, and the importance of water to the sustainability of tourism industry. Tourism has the potential to protect other natural resources other than water when resources are managed and exploited in a sustainable manner.

Sustainability entails meeting the needs of present generation without compromising the ability of future generation to meet their own needs. The UNWTO defines sustainable tourism to be: "sustainable tourism development that meets the needs of present tourists and host regions while protecting and enhancing opportunities for the future". This definition recognizes that sustainability is imperative for tourism planning and development as destinations encounter increasing pressure on the natural resources (e.g. water), cultural and socio-economic environments from tourism. The definition also gives present generation the responsibility to improve the future through responsible and wise use of natural resources. As regards water resources, tourism is expected to contribute

significantly to water conservation. We are therefore, enjoined to avoid mismanagement of water resources.

Importance of Fresh Water

Fresh water is an important source of food for humans. Fresh water fisheries are one of the most over exploited resources producing one quarter of the World's fish from only a fraction of a percent of the world's water resources. Food and agricultural sectors also use huge amounts of water.

In the tourism sector, water is of crucial importance as an asset and a resource. It is a resource because people feel drawn to it during their holidays as recreation facilities. Water is very important for the development of both indoor and outdoor tourism. For example, the beaches of rivers, seas, lakes are generally developed for swimming, recess and cruises of different dimensions. Springs depending on their mineral contents are usually bottled for drinking in resorts, restaurants, hotels or significantly developed for health tourism purposes. Water is a vital necessity for drinking, sanitary and public services. It has been found from researches that consumption of water for drinking and public services in resorts and hotels is several times higher than water consumption within households. The implication of this is that fresh water shortage can pose a serious threat to tourism growth.

The Need to Conserve Fresh Water

As suggested by the literature, approximately 97% of the water found on earth is salt water leaving about 3% of earth's water as fresh water. Of this, 70% is in the form of ice in glaciers, ice caps and as permanent snow. The remaining minority of available fresh water is trenched for use by Earth's 6.75 billion for agriculture, industry, recreation, tourism and municipal use. This remaining fresh water is in the form of lakes, ponds, rivers, streams and general wet land.

Researches also report that almost 20% of the world's population lives in areas of physical water scarcity. It is predicted that by 2030, the world might face a 40% global demand/supply gap of accessible reliable water supply for economic development. In

many tourism destinations in South Africa, demand for water exceeds supply and is seriously putting pressure on existing water resources (Mossa, 2003). The tourism industry is one of the major water users where water plays a determining part in everyday operation and potential growth. In some countries and regions, tourism can be the main factor in water consumption. In such areas, it can increase pressure on already dwindling water resources and compete with other sectors as well as subsistence needs of local population. Tourism can also directly affect water quality for instance through the discharge of untreated sewage or fresh water abstraction (Grossling 2010).

Tourism organizations have both a strong commercial and moral imperative for addressing water challenges. Because of the huge demand we have on fresh water system, they require management policies in order to monitor, regulate and protect. Water is a scarce resource in many resorts around the world so tourism companies have a responsibility not to use more than necessary; in rural or remote areas it ensures that local residents are not deprived of their essential supply and by reducing the amount of waste water that needs to be treated, this lessens the risk of water pollution.

Moral reasoning and the growing realization of the precarious nature of the Earth's fresh water are strong enough to compel tourism to share the responsibility to conserve fresh water to ensure that not only is water consumed efficiently and in the most sustainable manner, but also that risk management procedures are in place that guarantee continuing water supply for long-term viability of tourism businesses as well as the broader community. It is expected that wastewater and sewage should be properly treated and disposed so as not to contaminate the groundwater.

Tourism organizations can achieve significant cost savings and environmental benefits through water conservation. According to Hunterwater (2009), experience in the hospitality industry sector is showing that conserving water will not only save money, it will also provide an important marketing edge in a very competitive industry. Water is never free even if it comes from a well/borehole because of energy costs for heating, treating and pumping as well as equipment depreciation, maintenance, waste-water treatment costs etc .In tourism organizations (particularly hotels) water expense constitutes about 10% of their operational costs.

Our moral commitment to preserving water also stems from the fact that water is God's creation and gift to mankind and we are invited to preserve it. The Pontifical Council (2013) reminds us that we are stewards of God's creation, not owners. In other words, preserving our natural resource is an obligation bestowed on us as stewards. We must therefore, encourage rational use of water and minimize incorrect and unjust uses, promoting appropriate policies with a view to protecting our common future.

Establishing Water Management Plan

Global fresh water consumption has tripled over the past 150 years; and the lack of access to clean drinking water is a critical issue for many countries and regions. Hence, there are a range of global initiatives and standards being established to address water challenges. Tourism sector has become an active contributor to the discussions and initiatives.

At the 1992 United Nations Conference on Environment and Development (UNCED), an international day to celebrate fresh water was recommended, and since then World Water Day has been held annually on 22nd March. The day aims at focusing attention on the importance of fresh water and advocating for the sustainable management of fresh water resources. In addition to the above, the United Nations declared 2013 as the international year of water co-operation. The World Water Day is dedicated to the theme of co-operation around water.

The International Tourism Partnership (ITP) established a water working group in 2012. ITP is currently working with its global hotel company members to address how the industry should address water challenges. This collaboration is being conducted through the working group on water, with its first objective: To produce a risk analysis of key water issues-present and forecast of water availability and quality along with an assessment of any cost and regulatory implications in selected geographic regions in order to increase awareness and understanding of how and where water issues present a significant risk to the industry's future. ITP is collaborating with the Stockholm International Water Institute (SIWI) in conducting researches on the above.

In the same vein, the Global Sustainable Tourism Council (GSTC) recently launched Global Sustainable Tourism Criteria in which it is stated that the activities of a tourism company should “not jeopardize the provision of sanitation to neighboring communities. GSTC encourages tourism businesses to get involved in broader destination initiatives that enhance the stewardship of water resources. It enjoins the tourism sector to even play a leadership role and act as a role model or innovator to improve resource efficiency and management. For instance, tourism can contribute to overall water quality improvement at the destination level. There are many other groups at the global level, but time does not permit us to discuss their initiatives.

Individual tourism organizations are encouraged to carry out water conservation measures in their daily operations. Addressing water consumption in a tourism destination involves three key dimensions: management, technology, and behavioural change.

Organizational Change and Management

Water demand can be reduced by the adoption of best practice water management principles. For instance, demand management, a policy for infrastructural maintenance and renewal and management document detailing equipment, sources and how to manage them for conservation purposes can be undertaken at local levels. There are reports that organizations are adopting best practices in water and wastewater management. Organizations that adopted such practices are reporting significant savings in operating expenses with regards to cost of water supply and wastewater management.

Technological Change

Organizations are encouraged to adopt technologies that can control water flow and reduce fresh water consumption and resulting wastewater. There exist technologies that can harvest rain water for use as a primary source of potable water. Harvested rainwater can also be used in watering the garden and in the laundry operations. Low-flow and adjustable shower heads reduce water consumption. The South African Department of Water Affairs and Forestry (DWAFF) has launched a project to ensure that hotels, conference centres and restaurants use water efficiently through improved plumbing technology (Moosa, 2003).

Behavioural Change

This approach calls for improving one's knowledge and providing opportunity for the workers to learn about the consequences of wasting water and the benefits of water conservation. Workers are trained in measures and procedures for conserving water during their day-to-day activities. Staff can be motivated by rewarding those who participate in water management programmes.

In the same vein, programme for educating guests can be developed to intimate them of their expected roles, and procedures and impacts of their trips. It is also important that guests are well informed of the policies and their objectives in order to remove any cynicism and make them understand that the purpose is not to lower service quality, but to improve quality and enhance their satisfaction.

How to Conserve: General Suggestions

- Increase employee awareness of water conservation.
- Seek employee suggestions on water conservation; locate suggestion boxes in prominent areas.
- Conduct contests for employees (e.g. posters, slogans, or conservation ideas).
- Install signs encouraging water conservation in employee and customer restrooms.
- When cleaning with water is necessary, use budgeted amounts.
- Read water meter weekly to monitor success of water conservation efforts.
- Assign an employee to monitor water use and waste.
- Determine the quantity and purpose of water being used.
- Determine other methods of water conservation.

Building Maintenance

- Check water supply system for leaks and turn off any unnecessary flows.
- Repair dripping faucets, showers and continuously running or leaking toilets.
- Install flow reducers and faucet aerators in all plumbing fixtures whenever possible.
- Reduce the water used in toilet flushing by either adjusting the vacuum flush mechanism or installing toilet tank displacement devices (dams, bottles, or bags).

- As appliances or fixtures wear out, replace them with water-saving models.
- Shut off water supply to equipment rooms not in use.
- Minimize the water used in cooling equipment, such as air compressors, in accordance with the manufacturer recommendations.
- Reduce the load on air conditioning units by shutting air conditioning off when and where it is not needed.
- Keep hot water pipes insulated,
- Avoid excessive boiler and air conditioner blow down. Monitor total dissolved solids levels and blow down only when needed.
- Instruct clean-up crew to use less water for mopping.
- Switch from wet or steam carpet cleaning methods to dry powder methods.
- Change window cleaning schedule from periodic to an on-call/as required basis.

Pools

- Channel splashed-out pool water onto landscaping.
- Lower pool water level to reduce amount of water splashed out.
- Use a pool cover to reduce evaporation when Pool is not being used.
- Reduce the amount of water used to clean pool filters.

Kitchen Area

- Turn off the continuous flow used to clean the drain trays of the coffee/milk/soda beverage island; clean the trays only as needed.
- Turn dishwasher off when not in use. Wash full loads only.
- Replace spray heads to reduce water flow. If necessary, use pounded water. Use water from steam tables to wash down cooking area.
- Do not use running water to melt ice or frozen foods.
- Use water-conserving ice makers.
- Recycle water where feasible, consistent with state and county requirements.

- Recycle rinse water from the dishwasher or re-circulate it to the garbage disposer. Presoak utensils and dishes in pounded water instead of using a running water rinse.
- Wash vegetables in pounded water; do not let water run in preparation sink.
- Use water from steam tables in place of fresh water to wash down the cooking area.

Bar

- Do not use running water to melt ice in the sink strainers.

Laundry Facilities

- Reprogram machines to eliminate a rinse or suds cycle, if possible, and not restricted by health regulations.
- Reduce water levels, where possible, to minimize water required per load of washing,
- Wash full loads only.
- Evaluate wash formula and machine cycles for water use efficiency.

Exterior Areas

- Do not water landscape every day; two-to-three times a week is usually sufficient.
- Stop hosing down sidewalks, driveways, and parking lots.
- Wash autos, buses, and trucks less often.
- Avoid plant fertilizing and pruning that would stimulate excessive growth.
- Remove weeds and unhealthy plants so remaining plants can benefit from the water saved.
- In many cases, older, established plants require only infrequent irrigation. Look for indications of water need, H such as wilting, change of color, or dry soils.
- Install soil moisture overrides or timers on sprinkler systems Time watering, when possible, to occur in toe early morning or evening when evaporation is lowest.
- Make sure irrigation equipment applies water uniformly. Investigate the advantages of installing drip irrigation systems.
- Mulch around plants to reduce evaporation and discourage weeds.

- Remove thatch and aerate turf to encourage the movement of water to the root zone,
- Avoid runoff and make sure sprinklers cover just the lawn or garden, not sidewalks, driveways, or gutters.

Summary/Conclusion

Tourism activities have both negative and positive consequences. Tourism plays significant role in the economies of many nations by generating employment, income, foreign exchange and contributes to balance of payment. Tourism is the largest employer of labour in many countries of the world.

Tourism activities cause environmental stress, consume natural resources and have negative impacts on the socio-cultural life of both host communities and tourists. Tourism has direct environmental impact on water quality, air and noise levels. Sewage disposal into water will add to pollution problems as will the use of powered boats on inland water ways. Tourism activities can put scarce resources such as water under severe pressure thereby reducing accessibility to fresh water.

However, tourism has the potential to ameliorate environmental stress through sustainable tourism development approaches, thereby protecting our common future. Sustainable tourism development is a “development that meets the needs of present generation without compromising the ability of future generations to meet their own needs”. This definition bestows on the present generation the moral responsibility to use water resources in a wise, equitable and responsible manner. This also entails that we use, preserve and conserve water. As we consume water today we must remember that there is tomorrow. Research evidence tells us that some countries and regions of the world are already experiencing fresh water scarcity, and that this problem will be exacerbated by climate change. It is well known that the tourism industry is water intensive, and that water as a natural resource is not inexhaustible.

It is in recognition of the above that the UN declared 2013 a world year of water co-operation and in line with this declaration; the UNWTO chose the theme for 2013 World Tourism Day Celebration. The use of water is a major issue for the sustainability of

tourism. Research evidence reveals that a tourist staying in a hotel uses more water per day than a local inhabitant.

The UNWTO draws our attention and reminds us of our collective responsibility to conserve and treat water as a precious resource. Our attention is also drawn to the fact that water is not an inexhaustible resource and that its mismanagement will lead to grave consequences for both present and future generations. To protect our common future, tourism sector must be committed to more sustainable principles.

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