Concept Note

Informal Roundtable on addressing water scarcity through cost effective and innovative responsible business practices (RBP) in the Resort Industry in ESCAP Countries
Bangkok, Thailand
Venue (to be confirmed)
25-26 August 2016

Background

"*Water is wasted and poorly used by all sectors in all countries. That means all sectors in all countries must cooperate for sustainable solutions. We must use what we have more equitably and wisely.*" - United Nations Secretary General Ban Ki-Moon (at the Budapest Water Summit).

Responsible business practices (RBP) is based on internationally accepted or recognized principles, standards or guidelines as an instrument to ensure or improve the sustainability of business across the three dimensions of sustainability, i.e. economic, environmental and social. RBP helps businesses, from large multinational corporations (MNCs) to small and medium-sized enterprises (SMEs), to minimize their negative impacts on the environment and communities, optimize their contribution to preserving the environment and meeting social objectives and be more cost effective to optimize profits. The underlying rationale is that responsible and sustainable business is good for profit also and enhances competitive advantage.

With the above in mind, RBP can serve as a viable instrument to aid various sectors such as the hospitality sector to overcome any number of challenges including water scarcity that increases the costs of doing business. Root causes of water scarcity include increasing erratic weather linked to climate change, population growth and poor water management leading to freshwater overuse, waste and pollution. The environmental and social impacts are severe, particularly in regards to agriculture productivity, damaged ecosystems, health and sanitation[1]. Droughts and social vulnerability translates into significant economic losses, predominantly incurred by the agricultural sector[2]. In 2015, water crises were ranked as the number one global risk by the World Economic Forum in terms of its widespread damaging impacts.

In the face of increasing erratic weather events such as prolonged droughts, "demand for fresh water is likely to outstrip supply by 40 per cent by 2030 and a third of the world's population will be living in areas of severe water stress by this time"[3]. Additionally, by 2025, 1.8 billion people will be living in countries or regions with absolute water scarcity, and two-thirds of the world population could live under water stress conditions[4]. Further, the World Meteorological Organisation (WMO) notes that there is evidence that global warming is speeding up the

[1] World Wild Life (WWF). Water Scarcity Fact Sheet, http://www.worldwildlife.org/threats/water-scarcity
[2] UNESCO (2014). UN's World Water Development Report 2014, http://www.unesco.org/new/en/natural-sciences/environment/water/wwap/wwdr/2014-water-and-energy/
[3] United Nations Secretary General Ban Ki-Moon (at the Budapest Water Summit)
[4] UN-water: Water Scarcity Fact Sheet (2013), http://www.unwater.org/publications/publications-detail/en/c/204294

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hydrologic cycle, - the rate at which water evaporates and falls again as rain or snow.[5] It brings longer droughts between more intense periods of rain. Climate change has major implications for water use. First, it changes the way plants grow. Trees, for example, react to downpours with a spurt of growth. During the longer droughts that follow, the extra biomass then dries up so that if lightning strikes, forests burn more quickly. On crops, the most immediate consequence of drought is a fall in crop production, due to inadequate and poorly distributed rainfall. Farmers are faced with harvests that are too small to both feed their families and fulfill their other commitments. Second, climate change increases problems of water management. Larger floods overwhelm existing controls. Reservoirs do not store enough to get people or plants through longer droughts.

In the Asia Pacific region, new evidence on climate change acceleration shows an increasing tendency in the intensity and frequency of extreme weather events over the past 20 years.[6] Significantly longer heat-wave duration has been observed in many countries of Asia, as indicated by pronounced warming trends and several cases of severe heat-waves.

Addressing water scarcity in the resort industry

In comparison to other economic sectors, such as agriculture which constitutes an estimated 70 per cent of total water consumption, there are no specific regional or national water use statistics for tourism, and tourism-related water use is still relatively little investigated.[7] At the regional level of analysis, because tourism concentrates traveler flows in time and space, (often in dry regions or in areas where dry season is also peak tourist season, islands with limited water supplies, and where renewable water reserves are limited) water plays a determining part in everyday operations and potential growth (stressing the specter of increasing erratic weather such as prolonged drought).

Resort grounds and infrastructure can use vast amounts of water to operate resort restaurants, provide cleaning services, maintain landscape and resort facilities. From a life-cycle perspective, hotels' water footprint includes off-site and on-site consumption, from infrastructure building and food supply to energy consumption and waste treatment. Also, because tourists use more water when on holiday, estimated at an average of 300 L per day (direct water use), than at home (160 L per day), tourism increases global water use.[8] Water consumption by

[5] WMO (2000), Our World, Global Climate, Global Warming. : http://www.wmo.ch/pages/about/wmo50/e/world/climate_pages/gl obal_warming_e.html
[6] Brookings Institute, Asia Third Assessment Report p.473: www.brookings.edu/wolfensohncenter
[7] Tourism and water use: Supply, demand, and security – An international review. P.9.
[8] Eurostat (2009). *Medstat II: 'Water and Tourism' pilot study* Eurostat, European Commission.Available from:http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS-78-09-699/EN/KS-78-09-699-EN.PDF

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hotels is far higher than household consumption, due largely to the collective consumption of water in hotels (watering of gardens that must be kept attractive, daily cleaning of rooms, filling and maintaining of swimming pools, kitchen and above all, doing the laundry. Higher laundry volumes per guest per day are a result of sport and health centres, as well as affected by textile quality and/or weight of laundry items, including for example very large towels at spa facilities.[9] Additionally, there is a tendency by tourists to use more water while at a resort then at home.

Tourism destinations can be those most prone to water shortage due to already being located in water scarce areas and/or where municipal water supplies do not reach. In locales where water is already scarce, limited water supplies can pit communities and the resorts in their midst to compete against each other for water, particularly where the tourism season coincides with the driest months. Also, tourism is often a major user of freshwater in areas where water is scarce or where renewal rates of aquifers are limited, and its contribution to water consumption can be nationally and regionally significant, highlighting calls from the Stockholm International Water Institute (SIWI) that lack of water in relation to water requirements is another critical issue that needs to be addressed.[10] This can be caused by increases in demand, droughts, land degradation, population growth, pollution, emerging sectors of additional demand. While all sectors will be impacted, the hospitality sector (resorts) often a major supplier of employment in many rural and remote locales must address the increasing costs brought about by increasing erratic weather events such as more pronounced drought periods.

Regionally, in Phuket, Thailand, resorts such as found along Kata and Karon beaches are completely reliant on water trucked in each morning to meet daily resort needs as they are not hooked up to the already stressed municipal water supply.[11] In Myanmar, communities are selling their access to wells to hotels, with the water being used for irrigation of golf courses and other water-intensive facilities such as landscaped grounds, requiring irrigation, particularly in water stressed areas such as Ngapali beach in Rakhine State or Bagan, located in the country's dry zone.[12] Consequently, beyond on-site water efficient practices, responsible sourcing can generate significant environmental economic and social benefits for both the resort and the local community.

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[9] Tourism and water use: Supply, demand, and security – An international review. P.9.
[10] Stockholm International Water Institute (SIWI) 2008, On the Verge of a New Water Scarcity: A call for good governance and human ingenuity. P. 3
[11] Phuket News: Water truck crashes in Kata -http://www.phuketgazette.net/phuket-news/Water-truck-crashes-Kata/8126
[12] Myanmar Centre for Responsible Business, Sector-Wide Impact Assessment (SWIA) of Myanmar's Tourism Sector Partial draft for consultation August 2014

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In Asia-Pacific, the total contribution of travel and tourism represented 9.2 per cent of GDP and 8.5 per cent of total employment in 2014, and is forecasted to rise by 5.0 per cent and 2.0 per cent per year respectively[13]. In 2011, the region received 28.4 per cent of total tourism arrivals worldwide, making it the second most attractive destination after Europe[14]. Tourism plays a key role in the region's socio-economic progress via the following:

- Balance of payments: - for many nations, tourism is often the main source of foreign exchange earnings, although some reductions of the net benefits of the balance of payments can be expected because of the actions of foreign tourist operators;
- Regional development: tourism frequently spreads economic activities more across the internal border of the particular country; diversification of the economy: because of its multi-faceted nature, tourism may foster the build-up of solid economic development;
- Income levels: the income effects of tourism may give rise to wide variations in income multiplier;
- State revenue: the State earns revenues due to tax collections, although it has been acknowledged that significant expenditures for infrastructure such as airports and roads may also be required;
- Employment opportunities: in most countries tourism is an important source of employment, especially for the unskilled and semi-unskilled labour-force.[15]

Therefore, investing in water conservation can spur community development, both vital for resorts operating in Asia-Pacific.

Building resiliency, aligning with, and advancing the Sustainable Development Goals through RBP: Water

The Sustainable Development Goals (SDGs) covers a wide range of drivers across the three pillars of sustainable development, and include a dedicated goal on water and sanitation (SDG 6) that sets out to "ensure availability and sustainable management of water and sanitation for all". SDG 6 contains six targets on outcomes across the entire water cycle, and two targets on the means of implementing the outcome targets. Of specific interest to the resort industry, targets 6.3 to 6.6 address the broader water context that was not explicitly included in the MDG framework, but whose importance was acknowledged at the Rio+20 Conference, such as water quality and wastewater management, water scarcity and use efficiency, integrated water resources management, and the protection and restoration of water-related ecosystems.

[13] World Travel and Tourism Council (2015), Travel & Tourism Economic Impact 2015 Asia Pacific, p1.
[14] UNESCAP, Statistical Yearbook for Asia and the Pacific
[15] PEARCE D. W., 1991, Tourist Development, Longman, New York.

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Additionally, targets 6.a and 6.b acknowledge the importance of an enabling environment, addressing the means of implementation and aiming for international cooperation, capacity-building and the participation of local communities in water and sanitation management. With water at the very core of sustainable development, SDG 6 does not only have strong linkages to all of the other SDGs, it also underpins them; meeting SDG 6 would go a long way towards achieving much of the 2030 Agenda.

Thus, addressing water issues through RBP can be both cost effective and contribute to country commitments on advancing the 2030 development agenda. Specifically RBP can be applied via good practices in water efficiency, water use management, innovative ideas and technology, sustainable landscape architecture and maintaining natural landscapes that also serve as natural catchments. Examples of each can be found among the resort industry and other private sector initiatives, government and private research institutes and other entities interested in cost effective and sustainable water usage. All tourist facilities can save substantial amounts of water.

For instance, it is estimated that hotels can reduce indoor water consumption by 30 per cent by installing water efficient fixtures.[16] There is even greater potential to reduce outdoor water demand around hotel grounds via minimising water consumption in landscaping. Research finds that sustainable landscaping practices can conserve 30-50 per cent of water.[17] Measures include installation of water meters to monitor water use, selection of drought resistant plants and grasses, mulching of garden beds to reduce evaporation, installation of drip irrigation systems with electronic controllers and moisture sensors, and the use of rain or grey water for irrigation, catchments can also be explored for larger resorts with extensive grounds. In many locations use of indigenous plants for landscaping purposes along with appropriate garden designs may reduce then need to irrigate altogether.

With South-East Asia being a major tourist destination as well as a significant economic