

## It's about freshwater, stupid!



Freshwater is the most precious resource of our arid, densely-populated archipelago.

The proliferation of car washes and other water-guzzling 'attractions', such as water parks and manicured roundabouts with unnaturally lush green lawns, seem like our version of Potemkin Village, a fake village built in 1787 by Grigory Potemkin to impress Empress Catherine II during her visit in Crimea.

Despite the water largesse we are accustomed to, Malta ranks as one of the 10 'thirstiest' (meaning having the lowest volumes of renewable water per capita or inhabitant) countries in the world.

This fact has been crystallised in many reports by international entities, such as Food and Agriculture Organisation and the World Bank, which track the level of water stress, often measured as Total Renewable Water Resources (TRWR) per inhabitant. This in turn hinges on the amount of precipitation a country receives (as this replenishes exploitable groundwater) and only to the volume of internal freshwater resources it holds, such as rivers and lakes.

On the continental level, America has the largest share of the world's total freshwater resources with 45 per cent, followed by Asia with 28 per cent, Europe with 15.5 per cent and Africa with nine per cent.

On the country level, however, there are huge discrepancies in TRWR values, with the pendulum swinging wildly between Kuwait's 10m<sup>3</sup> per inhabitant to the burgeoning 100,000m<sup>3</sup> per inhabitant in countries like Canada and Iceland. In an average year, 1,000m<sup>3</sup> of water per inhabitant is normally considered as the minimum threshold to sustain life and ensure agricultural production in countries with climates that require irrigation for agriculture. Any country with a TRWR level below this is considered to be suffering from water stress.

Malta with its poor TRWR level of 121m<sup>3</sup> per inhabitant, forms part a group of countries affected by water stress, which includes arid countries such as Libya and Saudi Arabia. And the prospect of improving Malta's ranking are dwindling as its groundwater quality deteriorates due to high nitrates and salinity levels.

Other country rankings, such as that of the World Resources Institute, place the onus on the levels of freshwater extraction within each country, rather on their internal freshwater resources. Using this yardstick, Malta again scores highly on the 'thirsty' list, being listed as one of the countries where over 80 per cent of all available freshwater is extracted for various uses.

Malta's false security regarding water consumption is buoyed by an increasing reliance on desalination plants, whose output comes at a cost which eludes many – roughly four to five per cent of the country's total energy consumption. In case of a cataclysmic event involving the complete shutdown of desalination plants and groundwater extraction, Malta's freshwater reservoirs hold less than a week's supply.

It is against this sobering background that HSBC Bank plc has chosen to invest its time and resources in the HSBC Water Programme in partnership with the World Wildlife Fund, WaterAid

and EarthWatch. Launched in 2012, it is backed by an investment of €73 million over five years, with €48 million earmarked for developing countries and €26 million for other countries where HSBC is present, including Malta.

## *Malta's freshwater reservoirs hold less than a week's supply*

A government proposal supported by HSBC Malta won €500,000 worth of HSBC Group funding to develop the Catch the Drop Campaign, a strategic three-year initiative that began in October 2013. Malta's participation in the campaign is rooted in the education sector. Almost 300 HSBC staff volunteers have been trained and during the 2013 -2014 scholastic year they visited nearly all schools in Malta to give presentations about the water shortage and water conservation.

Educational and guided visits to the Pembroke reverse osmosis plant, to hotels implementing a water-conservation programme and to the bird park wastewater treatment plant were also held. Twenty schools that devised a feasible water conservation strategy for their premises or their communities received financial support to implement the strategy.

The educational campaign in schools is set to be cranked up even further this summer through the participation of the estimated 10,000 summer school students, who will be regularly briefed about the campaign and its scope. The campaign has set itself some ambitious targets, including reaching out to every single primary and secondary school student (approximately 47,000) in Malta and Gozo, and every one of the 67 local councils.

Catch the Drop also hammers the water-conservation message home through the laudable levels of awareness it is generating in all the community strata with which it interacts. For instance, the material compiled for dissemination as part of the campaign is jam-packed with eye-opening snippets of information, such as that on average, every Maltese inhabitant consumes 135 litres of freshwater per day, of which less than seven are used for drinking and cooking purposes. Personal hygiene (showers and baths) and toilet flushing claim the lion's share when it comes to domestic water consumption, swallowing 42.8 and 31.9 litres of water, respectively.

The material also solicits readers' active co-operation through a number of feasible water-conserving measures. These include repairing dripping taps, avoiding boiling unnecessarily large volumes of water to make a cup of tea, avoiding running taps when brushing one's teeth and opting for a quick shower rather than for a bath.

<ftp://ftp.fao.org/agl/aglw/docs/wr23e.pdf>

[www.wri.org/blog/2013/12/world%E2%80%99s-36-most-water-stressed-countries](http://www.wri.org/blog/2013/12/world%E2%80%99s-36-most-water-stressed-countries)

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