

Time to act on plastic



Plastic litter has become something of a mainstay in our waters, whether it's floating at the surface or studding the seabed. Seen here are photos taken in Delimara a few days ago.

It's not that common that news emerging from Africa hogs the global media limelight. But that's exactly what happened earlier this week when a 10-year-long effort by Kenya to introduce draconian measures with the aim of stemming the flow of plastic litter into the environment finally bore fruit, with a bang.

Nairobi announced, in fact, that anyone caught producing, selling or even carrying plastic bags will fall foul of the law and can face imprisonment of up to four years, besides fines of up to \$40,000. Kenya joins over 40 other countries which have totally or partly banned or taxed the use of plastic bags within their territory, including China, France and Italy.

In 2015, the European Parliament endorsed a new directive which aims to stem the increased adoption of single-use plastic bags across Europe. The new directive requires Member States to progressively reduce their use of plastic bags, with an initial threshold of 90 bags per person per year by 2019, followed by 40 bags in 2025. It was estimated that in 2010 an average of 198 plastic bags per person per year were being made use of across Europe.



You don't need to be a dyed-in-the-wool sea buff to realise that our seas are fast becoming prolific recipients of litter, especially of plastic litter. The stuff is literally carpeting the seabed of popular bays and is frequently encountered as entangled floating masses at the surface. While marine-borne litter is not exclusively composed of plastic, with textiles and ropes, wood and rubber also represented in the total litter repository, plastics, by virtue of their wide functionality, are most represented.

From data reported for Malta in 2014 as part of a UNEP assessment, the three most frequently encountered plastic litter items within coastal waters (in order of importance) were plastic cap bottles, plastic bottles and food wrappers. Cigarette butts are a mainstay of most popular Mediterranean beaches, unfortunately, and ours are no exception. Possible ways to curb the disposal of such butts on beaches, which also pose a health hazard to kids dabbling with the sand, is to distribute portable ashtrays to smokers on the beach, as is regularly done in countries like Denmark, besides ratcheting up on-the-spot fines for offenders.

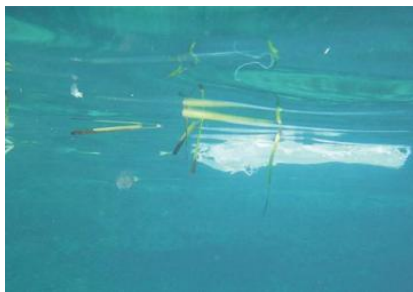
The initiative taken in Nairobi may come across as drastic but the statistics for the global presence of plastic on our planet is sobering. For instance, according to the Science Advances magazine, an estimated 6.3 billion tons of plastic litter grace our planet at the moment, which is roughly equivalent to an average of one ton per every inhabitant of the world. And there's more grist for the mill. In 2015, global plastic production rates totalled 322 million tons, up from 230

million tons in 2005 and certainly up from 1.4 million tons produced in 1950, marking a 200-fold increase in annual plastic production rates over the span of 65 years.

These rates are anticipated to double within the next 20 years and to quadruple by 2050, when plastic production is expected to guzzle up to 20 per cent of all oil production, a pronounced spike from the current five per cent. The ubiquity within the marine environment of plastics is such that even deep-sea canyons, located at depths of thousands of metres within the northwestern corner of the Mediterranean, have been found to be sullied by plastic litter through ROV (Remotely Operated Vehicle) surveys conducted by IFREMER (French Research Institute for Exploitation of the Sea).

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Where does all this plastic end up? The lion's share (an estimated 79 per cent) is shoved to dumps or finds its way directly to the environment, with an estimated refuse truckload equivalent of plastic ending up in our seas every minute. In fact, despite the staggering volumes of plastic being produced, just five per cent of all plastics are recycled at a global level. Three-quarters of all litter recorded in the sea originates on land, with the rest being dumped directly through shipping and fishing vessels.



In the same way that Malta has bitten the bullet when it came to the sewage discharge and fish-farm slime challenges through the construction of sewage-treatment plants and through offshore relocation, respectively, it's high time we get our act together when it comes to tackling plastic litter within our seas. Innovation is obviously the name of the game and Bright Vibes has conceived the idea of organising 'fishing for plastic' trips for conscientious snorkelers while on holiday.

There are some who would counter that such a move (i.e. encouraging tourists to lend a hand to collect plastic from the sea) would be a self-indictment of our marine plastic problem, although the problem is so self-evident that it can no longer be swept under the carpet. We should also actively consider introducing a pilot 'plastic-free beach' case study, with the distribution and use of single-use plastic on such a beach being completely prohibited and alternative materials being promoted by Wasteserv employees on site.

There are other simple measures which can be adopted by each one of us so to stem the flow of extraneous litter into the sea, such as avoiding completely the use of balloons, at least in areas close to the sea. The Ocean Conservancy, a US-based NGO which regularly organises sea clean-ups, estimates that only last year it plucked enough balloon remnants from the sea so as to lift a walrus. The quantities of litter regularly retrieved from our coastal and rural areas by the environmental NGO Zibel, which was specifically set up locally for addressing the litter problem, are also staggering.

Although this column exclusively focused on macrolitter, one has to bear in mind that there is yet another, perhaps more sinister side to the story – microplastics – fragments which are smaller than 5mm and which are more insidious due to their small dimensions, even entering marine food chains.

The US Embassy is sponsoring the screening of the landmark Plastic Ocean documentary on October 10 within the next EMSEA Conference being held by the University of Malta at the Valletta campus. A limited number of places for the public are available for such a screening.