Turning The Tide



CIWM President, **Professor David Wilson MBE**, has been looking at marine litter, and the growing issue of plastics entering the oceans, for some time. He concludes that, unfortunately, turning the tide will not be easy... but also not impossible

ne of my early engagements as CIWM President was as a workshop leader at Oceans 21, the latest Development Finance Forum (DFF) organised by the German Development Bank, KfW. My workshop on marine litter sat alongside others on marine protected areas and sustainable small-scale fisheries. The scene was set by Jo Ruxton, a producer on Blue Planet I, who spent eight years making the film "A Plastic Ocean" (available on Netflix or at www. plasticoceans.uk), which really hits you in the solar plexus. By coincidence, the horrific impacts of marine plastics were highlighted in Blue Planet II, the day before the DFF.

The conclusions of the two-day workshop at the DFF were clear. The

amount of plastics entering the oceans is estimated by modelling studies as at least an order of magnitude greater than estimates of the visible quantities in the oceans or on beaches – so the first priority is to "turn off the tap". More than 90 percent comes from land-based sources. Between 4 and 12m tonnes per annum comes from mismanaged solid wastes generated within 50km of the coast, of which more than 50 percent comes from just five east Asia countries.

Another 400,000 to 4m tonnes comes via rivers, with more than 90 percent of that from 10 major rivers in Asia and Africa. Putting all of the evidence together, our conclusion was that the quantities of plastics entering the oceans could be halved simply by meeting two of the

sustainable development goals relating to improved municipal solid waste management in developing countries: extend collection to all and eliminate uncontrolled dumping and burning.

In discussing the solutions, the workshop also emphasised the importance of increasing recycling and recovery options for plastics; enabling local people to earn a living is the best way to ensure that leakage rates to the oceans actually reduce (providing a "pull" factor). Two parallel approaches here are to build on existing informal recyclers; and to create new livelihoods using non-recyclable plastics as the raw material, as outlined in the recent CIWM/ WasteAid toolkit (see the November issue of the CIWM Journal, p14).



The Blue Planet Effect

THE BLUE Planet effect has put the marine plastics issue firmly on the UK political agenda. Theresa May used the Climate Summit in Paris on 12 December to announce that international development finance would be diverted to reduce this "terrible pollution". In response, CIWM co-signed a letter to the Daily Telegraph with Tearfund, the Institute of Development Studies and WasteAid, urging that this should focus on improving solid waste management in developing countries. We followed that up with a letter to the Prime Minister, and I met before Christmas at Number 10 with Sir John Randall, her senior environment advisor. We are continuing to follow this up...

Of course, this is not the only action required to tackle plastics in the oceans. Global production of plastics is forecast to double again over the next 20 years, and most of that is for single use. So we need actions to reduce demand, to eliminate some of the unnecessary single use applications and to ensure that Extended Producer Responsibility really does what it says on the tin.

We need to reduce litter and other leakage into the oceans from developed countries too; and address other sources, including spillages of plastic pellets; micro- and nanoplastics in products; fibres from washing synthetic textiles; and microplastics from road vehicle tyre wear.

Northern Ireland led the way with a plastic carrier bag tax that has been



Flooding in Kinshasa, attributable mainly to blocked drainage channels and rivers, killed 45 people in a week in January 2018, and was followed by a deadly outbreak of cholera. Photo courtesy Mike Webster, WasteAid UK.

mirrored across the UK, and other current initiatives on banning microbeads, deposit refunds for plastic bottles and coffee cups could also help to address the problem. And we must not forget that the impacts are felt close to home, as well as across the globe: a report issued by Keep Northern Ireland Beautiful last year, for example, found there were on average 528 litter items found on Northern Ireland's coastline every 100 metres; and Cornwall is currently dealing with a "tidal wave" of waste deposited on some of its iconic

beaches by Storm Eleanor.

Turning the tide will not be easy. But halving the quantities of plastics entering the oceans by eliminating mismanagement of municipal solid wastes in developing countries is an obvious "low hanging fruit". Extending collection to all, and eliminating open dumping and burning, will also improve public health, create sustainable livelihoods and reduce poverty for some of the poorest communities in the world, making this a legitimate target for international development assistance. Let's make it happen!



Plastic waste clogging drainage channels in the commune of Masina, a suburb of Kinshasa in the Democratic Republic of the Congo, in December 2017, left and above.



Floods in Lagos see plastic filling the streets. Image courtesy of Margaret Oshode