

The impacts of improper solid waste management to our environment

[Environment](#), [Pollution](#)



The most apparent environmental issue we literally see everyday is the problem on solid waste management. Obviously, we can see piles of garbage around every corner of the streets; litters are scattered almost everywhere from your very own house, as you ride the jeep, and even until you reach the university. Now, you see what i mean? Unfortunately, improper solid waste management is one of the causes why we are suffering from different natural catastrophes such as rampant flooding and dying rivers and lakes. We better start off with the " garbage" talk. According to Gregorio Santos Jr., a senior science research specialist who works in DENR, do you know that the average solid waste generation is 0.56 kg/day for every person? Imagine, in the next 30 years in metro manila alone, we can generate about 230 million cubic meters of solid wastes, an amount that equates to a knee-deep layer of waste over the entire metropolis which is about 630 square kilometers. It can even fill the country's largest shopping mall for over 175 times. And for the same thirty (30) years we can generate about 70 million tons of solid waste, in which the collection of these wastes will require a line of waste trucks going three times around the earth and over half way to the moon and at a cost of over PHP 100 billion or \$ 1.9 billion. distressing as it is, DENR statistics shows that only 10 of these solid wastes are being recycled and composted while the remaining 90 % either go to the dumpsites, rivers, streets or backyards. With this massive solid waste generation, it undeniably causes rampant flooding. Important constituents of solid waste which contributes to floods are the plastic carrier bags. These solid materials slowly enter into the drainage system clogging the drainage canals and outlets. Take for an example the tragic case of typhoon Ondoy whose damage cost

reached a conservative estimation of the NDCC amounting to PHP 10.45 billion in infrastructure and agriculture only. The fact that solid wastes caused flooding was confirmed by then-denr secretary Lito Atienza, "garbage blocked the natural and man-made drainage systems so these failed to function properly". Also, during Leonardo Liongson's talk in UP Diliman, he stated that the record-high 12-hour rainfall amounts in Metro Manila on September 26, 2009 attained the annual maximum rainfall values for 150-year return period. As a matter of fact, the peak flood flows of Pasig-Marikina River which is 4000 cubic meters/second exceeded the 30-year design flood capacity of 2900 cubic meters/second for the DPWH flood control project. Unfortunately, Ondoy wreaked havoc to 80,000 families in 2009. The problem on solid waste management also poses a grave threat to our rivers and lakes. Government data showed that 10% of the 4,100 metric tons of waste generated by the residents of Metro Manila are dumped into rivers and lakes. And as reported by the now defunct MWSS, only 15% of the residents in the area have an effective waste disposal system. Not to mention that over 85% of the families living along the shoreline do not have toilets. Moreover, in Laguna, about 60% of the estimated 8.4 million people residing in Laguna de Bay discharge their wastes indirectly to the lakes through its tributaries. Shocking as it can get, the biochemical oxygen demand (BOD) loadings from these wastes significantly came from households which covers almost twice the percentage of wastes from industries and agriculture. Indeed, the issue on solid waste management impinges development, safety and security of the human race. It aggravates Mother Earth, thus, we suffer from nature's anger. But the good news about

it is " we can do something about it". The government with the participation of different stakeholders can significantly mitigate the effects of these natural phenomena. As a matter of fact, the government in partnership with the civil society groups had institutionalized environmental projects like the manila bay and Pasig clean-up. a series of environmental education and mobilizations like the inclusion of environment protection and management in tertiary level education, promotion of the " reduce, re-use and recycle" campaign and the Pasig run have successfully instilled the sense of urgency among stakeholders. Think about it, you can save the world, simply, by doing your part. And in case that you might've forgotten, it's the only world we got.