

What is waste?

What is waste, and how is it created

We can say that waste is a substance or an object that the person who has produced it, wants to get rid of. Often we only see the waste in our trash can, and it does not make us worry, but actually waste is a serious problem for the Planet. Why?

In nature, the concept of waste does not exist. In fact, in biological cycles whatever is discarded by one organism becomes a resource for other living beings so that nothing is wasted and everything is transformed. Dead organisms, animal faeces, or plant remains are defined organic waste and are used as food for particular organisms known as decomposers, that transform the waste products of other living beings into precious resources and are therefore very important.

Up to the last century, man behaved very much like nature. Specially in the farming society, due to the lack of resources everything was utilized and nothing was thrown as long as it was useful. Almost all that was thrown was organic and was disposed of by the decomposers in nature.

The advent of the industrial revolution and the increase in goods brought into society, also determined an increase in the consumption, and therefore an increase in the amount of waste. In fact, in the current social and productive models, after withdrawing material and energy from the environment in order to produce consumer goods, the production of waste follows. Waste is not only organic as in the pre-industrial society, but is also inorganic (as in the case of plastic) and often waste remains in the environment for a long period of time as it is not a source of food for any organism. This implies two things: first of all waste is generated by us during our daily activities, and by the industries that produce the products that we make use of to live, but also there are no cleaners that re-use a large part of our waste, and therefore it accumulates in large quantities. Human beings are trying to find some solutions. Which?

Waste in pre-industrial society ...

Even though in the past human beings produced small amounts of waste, the problem of where to deposit the same existed even then. Whatever could not be recycled or reutilized was often thrown on the road, with severe consequences for health. Alternatively waste was burnt or buried underground outside the inhabited centres, thus giving rise to the first waste dumps. Waste in ancient times was very different from ours. Waste was organic and consisted mainly of products that were discarded by the workshops and kitchens, human and animal waste, carcasses and their remains. The first humans who thought of waste disposal by burying waste underground were our ancestors – near their prehistoric settlements, in fact, archaeologists have found the remains of their meals (the bones of the prey they hunted) and small tools and earthenware. Instead, it seems that the Greeks were the first to feel the need for a public town-cleaning service, and a group of sweepers were appointed (probably slaves) to clean the city of Athens. During the Roman Empire, the Romans established the first public service for waste collection and disposal, and they exported this model all over the Roman Empire. In the Middle Ages the situation worsened remarkably and the citizens considered the road a privileged place where to get rid of their waste. In this period the forerunners of city waste dumps were born, cavities that were known as *butti*. The few inorganic waste products were disposed of differently. Before becoming waste, the objects changed owners various times, passing through the entire social chain. In ancient societies, and up to the dawn of the industrial society, whatever was thrown away, because it was considered useless by the rich, became precious for the poor.

... and in the consumer products' society

A big change took place in the second half of the XIX century. With the Industrial Revolution an intensive exploitation of the resources began. Industries started the mass production of items, that were more economical than those made by craftsmen and therefore more accessible to all. Soon humans passed from a frugal and semi-agricultural society, to an industrial consumer society, that adopted disposable objects as their style of life. Since some decades, objects are no longer repaired, nor are they reutilized as they can easily be replaced by other new ones. The result has been an excessive production of waste in relation to the planet's capacity to dispose of it, thus becoming the negative symbol of riches and wellbeing. With the industrial era also the kind of waste changed. Besides the increase of glass, metal and organic wastes, new materials, as for example plastic, have appeared, and as these are not biodegradable, they remain in the environment for a very long time.