

- Problem-

In the world, only around 8% of plastic is only recycled but why is that? Many people think it's because many people do not recycle their plastic but they just throw it away, however, there is even another problem, the segregation of waste. When people throw their waste in the dustbin, even if it wet waste dry waste or any type of waste is thrown away in the same dustbin, Now that dustbin is taken to the recycling centre, but since all the waste is mixed together, it is hard for the recycling centre to segregate the waste. Next littering, people throw their waste on the road and in the water, which affects marine life massively, and by throwing waste on our roads, stray animals may eat it thinking its food and get hurt.

#### Locality-

Aditya DSR Lakeside Indiranagar (Beside Barla Kunta Lake)Mouryas Ranga Prasad Avenue, Indira Nagar, Gachibowli, Hyderabad, Telangana 500032.

#### Why do we need to solve this issue-

This problem of no proper segregation of waste, recycling centers can't recycle the products since they're mixed together and it will be too hard for them to separate it, and littering on land and in the water affects marine life and stray animals a lot. If we let them still eat this plastic alot of our marine life will be dead and it is estimated if we continue on like this, there will be the same amount of fish and plastic in the ocean!

#### How do we solve this issue-

We can solve this issue by using the Recycollector, the recycollector is a machine which collects the waste on the land and water, it then travels back to a machine, this machine segregates the waste from wet waste, dry waste and metal waste. The recycollector has 3 machines, one that collects the waste on land, one on water and the final one which segregates all the waste. Then the waste is sent to a recycling center to be recycled.

#### Is sustainability the right way to solve this issue-

Yes, since , the definition of Sustainability or sustainable development is the development that meets the needs of the present generation without compromising the ability of future generations to meet their own needs. We need to solve this issue since it's affecting us now but if we don't do it in a sustainable way we might affect the environment again which affects future generations.

#### What are the sustainable products,methods and tools that we can use to solve this problem-

The 3 machines, they will be made from biodegradable materials which are materials that can be dissolved easily into the earth's environment that can also be recycled easily and are being reused from waste cardboard, and more recycled products are being used, In a process known as upcycling which takes waste materials and instead of throwing them away or taking them to a recycling plant you can directly reuse them to make new products like cardboard into a shoe rack for example.

#### Who will be the beneficiaries of the solution-

Marine life, since all the plastic will be removed from lakes ,rivers, etc. and even our localities will benefit since our streets will be clean. Finally the recycling centers will benefit since when we send the waste it is segregated properly.

