

Figure 6: Recycling Matters

From the field data, nearly 43% of glass which were used as recycling matter. Plastic materials used as recycling matter where its percentage was 35% and 21% percentage materials were metals.

3.6 Other Properties

The physical properties e.g. size of waste are discussed. From Jessore Pourashava, everyday 18692.21 kg vegetable wastes are produced by different houses. After drying total weight of household waste found is 6884.75 kg per day. After drying time the total weight of household waste is nearly 80%. That means approximately 20% water is found from the waste.

Chemical Properties

Every element has some chemical properties which are found in the elements. When elements are analyzed with chemical then found the chemical properties. But for the lack of proper facilities of lab and instruments in the university in this time, it could not be identified the chemical composition properly.

3.7 Household Waste Management Options

Household solid waste can be management in different way. But at first awareness of local people is very important. They should need to understand that waste can be wealth by proper managing of household waste. If local people understand that waste can be reused by different ways then they can be interested to be managed household waste and minimized the household waste in different ways such as reuses, recycling, reduce etc. Management systems of household waste in Jessore Pourasove are:

3.7.1 Segregation and Storage of Waste

If we collect household waste in a systematic way then we can be managed and reduced household waste. If every householder use different colour of bucket or bag for dumping of different waste then it will be easy to collect different waste and manage in a short time. For the collection of household waste people can use three colors of bins. These are:

a) **Blue color bin:** Blue color bin or bag is used for dumping food cans, tins and aerosols, glass bottles and jars, drink cans, plastic containers, plastic bottles, cartons etc. Some elements are also not used in the blue color bin such as carrier bags and film, polystyrene, children's toys and large plastic items and aluminum foil etc [6].

b) **Black color bin:** Black color bin is mainly used for the collection of dog waste and cat litter. Moreover other some elements are also used in the black color bin. But stones, soil and building materials are not used to dump in the black color bin [7].

c) **Orange color bin:** Orange color bin is used for the collection of brown cardboard, pizza boxes, cereal boxes, frozen/ chilled food boxes, egg boxes, toilet / kitchen roll tubes, shoes boxes, washing powder boxes, brown envelopes etc. but before collection of these materials people must need to remove all sticky tape and plastic wrapping from the cardboard.

d) Foil backed cardboard; drinks cartons are should not used for dumping into the orange color bin. These materials can be dumped into the blue bin for recycling materials if anyone wishes [7].

3.7.2 Collection

There are different processes or ways to collection of household waste. Such as anyone can be dumped waste directly to the dumping spot or any one can be dumped waste into the collection vans or trucks. If vans and trucks of waste are collected waste from house to house in separate ways such as different color bin wastes are collected by different color vans then it will be easily managed of the household wastes. Before collection of wastes, the wastes are packed in selected colors of bags. Some vans and trucks are used for the collection of different colors of bags and dump into the dumping spot.

3.7.3 Disposal

If these wastes are disposed in different places with their category, then different projects will be run to maintain the waste and reused the waste. Waste disposed mainly depends on the collection of waste. Before dumping of waste need to segregate waste and then collect them. Then some waste will be recovered such as glass, ceramic wastes, paper wastes etc. Some waste will be reused such as paper, poly bags, bamboo materials etc.

3.8 Total Household Waste Management System

Wastes are generated by the household activities. In this time some waste are reduced by the storage, collection and transfer system. Waste can be reduced by the generation point. Then storage, collection and transfer system help to reduce the waste product. After transportation of household it can be processed for the reusing of waste materials. Combustion, Composting, Materials Recovery are the process steps for converting waste materials to other usable form. These recovered or converting materials are selling into the market and customer buy it for their necessary work. After use of converting materials these are disposed into the box or other selected area by which materials can be reused

again. By this process one material can be reused in several times and also by during this process waste generation can be reduced and production of household waste can be limited by using this method.

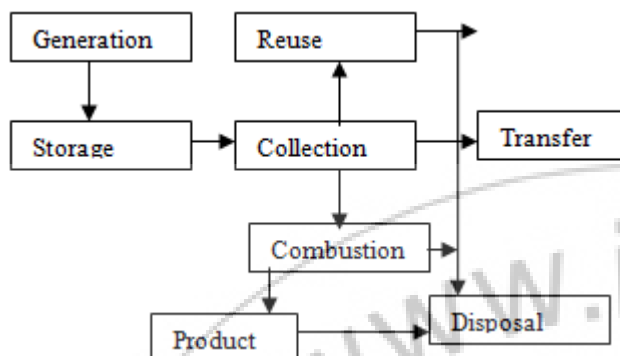


Figure 6: proposed HW management

4. Conclusions

In this study it shows that every day, Jessore Pourashava produced 21497 Kg household waste per day and produced 7846 ton waste per year. In the total amount of the waste 87% is vegetable waste, 4% waste is grass and wood, 1% plastic, 2% is paper waste, and only 1% is metal which are found from the household waste in Jessore Pourashava from my survey data. 3% waste is other types of waste such as dust of the yard or dust from the wood cooker etc. If we properly manage the household waste then we can be reused the household waste or recycled the household waste.

If we will also be managed combustible waste then we will get energy as equivalent to fossil fuel that will help us to meet our energy needs. But lacking of proper existing policies, rules, public awareness all the household wastes become wasted and dumped in an open filed. Public, Government, NGOs' should enhance the proper management system to produce less waste and more recovery of matter and alternative to produce energy.

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