Hairy Waste

About 63,000 pounds of hair waste from hair saloons only in Canada are sent into landfill every single day, which makes a total of 877 pounds of hair waste produced every single minute (Galloway, 2023). According to the academic journal of disposal of DISPOSAL OF WASTE FROM TATTOO AND BEAUTY PARLOR IN POLAND, random sample study of 824 beauticians, noted that almost 63.3% of beauty waste was being produced. The CEO of an environmental organization fighting beauty waste claimed that methane gas which is a contributor to climatic changes is created by the decomposition of hair that goes to the landfill in anaerobic condition (Kuczerowska-Gebska et al., 2021). This example demonstrates that hair waste has a direct negative effect on the climate. This is an indicator that awareness should be increased to all community members on the effects of producing hair waste. However, apart from hair waste going into landfill, it can be reused in the production of fertilizer, absorbing mats, and new saloon materials.

One solution to hair waste is that hair can be reused to create fertilizer that will support productivity in the agricultural sector. Plants are well fertilized by the nutrients contained in human hair. In this process, peptide bonds are broken down when hair has been treated by potassium hydroxide, then the hair is finally turned

into a liquid form. This liquid contains all the hair nutrients including oxygen and potassium, which are essential to the growth of plants. Therefore, a mixture of potassium hydroxide, water, and only 50 grams of hair produces one liter of concentrated liquid fertilizer (Television Channel, 2021). In 2020, David Denis, a young entrepreneur and innovator, gave a speech in ted talk on how he introduced his project in Arusha, Tanzania of making fertilizer by using human hair. He employed a number of people to collect waste from barber shops and bring it over to him so that he could use it in his project. Currently his project has expanded enough that he has been receiving orders of the fertilizer from different countries including Botswana, India, and Brazil (Denis, 2022). This innovation has not only solved the problem of hair waste but also opened job opportunities to many individuals and increased the production rate in the agricultural field. It is evident that human hair is an essential tool in the creation of fertilizer that can support agricultural productivity.

In addition to fertilizer, absorption mats require human hair as a crucial raw material in their production process. The hair is weaved by specific machines to create absorbing mats. These mats are very efficient in cleaning up oil spills. In a mixture of water and oil, oil is soaked up fast by the mat, then clear water pours out of it while hair keeps on holding the oil. These mats are used by most of the oil

companies to clean up their mess. *Matter of Trust* is a company in California that makes hair mats, whereby the founders collect hair from saloons in over 30 countries. This company creates mats that add surface area and even absorbs more oil than the poly booms (Business Insider, 2022). A Belgium nonprofit organization is another source of these absorbing mats. In this organization, hair salons are invited in the project and the founders send some bags to collect hair from them. Their mats have been used to absorb oil especially at the Belgium water stations. This is a great opportunity to eliminate hair waste from going to landfills by taking it to these producing companies (Galloway, 2023). Moreover, production of hair mats has tried to solve the problem of oil spills, in various water sources. Human hair can therefore be reused as a raw material for producing hair mats than being dumped into landfill.

Not only can hair be used to produce absorption mats, but also it can address the issue of reducing plastic waste by reusing hair clippings to create bio composite plastic. Hair clippings can be turned into bio composite plastics which can then be used to make new products (Green Circle Salons, n.d.). Researchers have found out that they are able to develop bio composite materials by combining hair and plastic waste in a unique formula to make new plastic pallets. These pallets can then be used to manufacture different types of new plastic materials including hair combs.

The manufactured hair combs can therefore be taken back to the salons. Matt Galloway, CBC podcast host explains that there are specific salons that are created to support this program. These salons are known as waste warriors. Currently, around 16,000 salons have been launched from different parts of the world and in Toronto there are almost 4,000 of these salons (Galloway, 2023). Not only does this program address the issue of hair waste, but also contributes to the growth of the economy as it directly involves production of new goods that can be taken to the market sector. Therefore, it is evident that hair clippings can be used in the production of new salon products.

Clearly, the 63,000 pounds of hair waste from hair saloons across Canada that are sent into landfill every single day, can be a good source of raw material to industries producing fertilizers, absorbing mats and new salon materials (Galloway, 2023). Rather than wasting these hair resources which are very useful to some of the producers into the landfills, they should be directly sent to these manufacturing companies. Every individual should take time to analyze where their hair goes after having a good haircut, if it goes to the landfills or to the producing companies.

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