REUSING FOOD AND COMMON ITEMS: THE ENHANCED VERSION OF DONATION

[1]Garima, [2]Ms. Sandeep Kaur

[1]Student, [2]Assistant Professor
[1]Department of Computer Science Engineering
[1]Lovely Professional University, Phagwara, India

Abstract: This case study provides an overview of an innovative approach undertaken by the non-profit organization, LetsDonate, which acts as an intermediary organization linking donors with non-profit organizations and their service recipients through a web-based donation platform. Since that process has been going on for years, LetsDonate is innovative in three respects. To begin with, it is because of its active use of technology and adaptation of philanthropic giving to a changing technological world. Second LetsDonate model of operation is innovative in reducing overall administrative costs. And third, the general structure of the LetsDonate program is innovative in its ability to assure donors that their money is being spent as they directed. Moreover, the user interface will be easy to use and user-friendly. The frontend will be developed using HTML, CSS, JavaScript, JQuery and for the database, firebase will be used. And these developments are addressed in relation to the growth of the company as well as the issue and context in which the innovations arose.

Keywords – **Web-based, user interface, frontend, and firebase.**

I. WASTAGE IN INDIA

According to a survey, 931 million tons of food is misused worldwide in 2019, enough to circle the Earth seven times. Household food wastage in India is estimated to be about 7 percent of worldwide misused food per year. And in India, 40% of produced food is wasted. Despite sufficient food production, the United Nations estimates that approximately 190 million Indians are malnourished. It also proves that India is a nation rife with inconsistencies. The amount of food waste in India is also estimated to be about 92,000 crores per year. "Indians eliminate as much food as the entire United Kingdom consumes," according to another survey conducted in the CSR journal. This is the time of year when millions of Indians go to bed hungry. Up to 25% of fabric is lost during the cutting and making of a garment, according to some reports. Given that India is a global hub for apparel production, there is undoubtedly a significant amount of pre-consumer waste produced by local manufacturing and tailoring facilities. Surprisingly, there is yet to be a comprehensive report on estimating these figures. But it is also a fact that clothes or textile is also wasted a lot worldwide. This wastage is not limited to food and clothes only. If we talk about total wastage which is done in India, every day India generates about 0.1 million tons of municipal solid waste. This equates to about 36.5 million tons per year.

HOUSEHOLDS WASTE THE MOST

Food available for consumption:
5.3 billion tonnes

Food waste:
931 million tonnes
(17% of available food)
(weight roughly equals that of 23 million fully loaded 40-tonne trucks — bumper-to-bumper, enough to circle the Earth 7 times)

SOURCE OF GENERATED WASTE AND % OF TOTAL WASTE
Retail 13%
Households 61%
Food Service 26%

ANNUAL PER CAPITA FOOD WASTAGE (GLOBALLY): 121kg
Annual per capita food wastage at:
Households 74kg
Food Service 32kg
Retail 15kg

COUNTRY-WISE ANNUAL PER CAPITA FOOD WASTAGE AT HOUSEHOLDS
(Country and kg/capita/year)

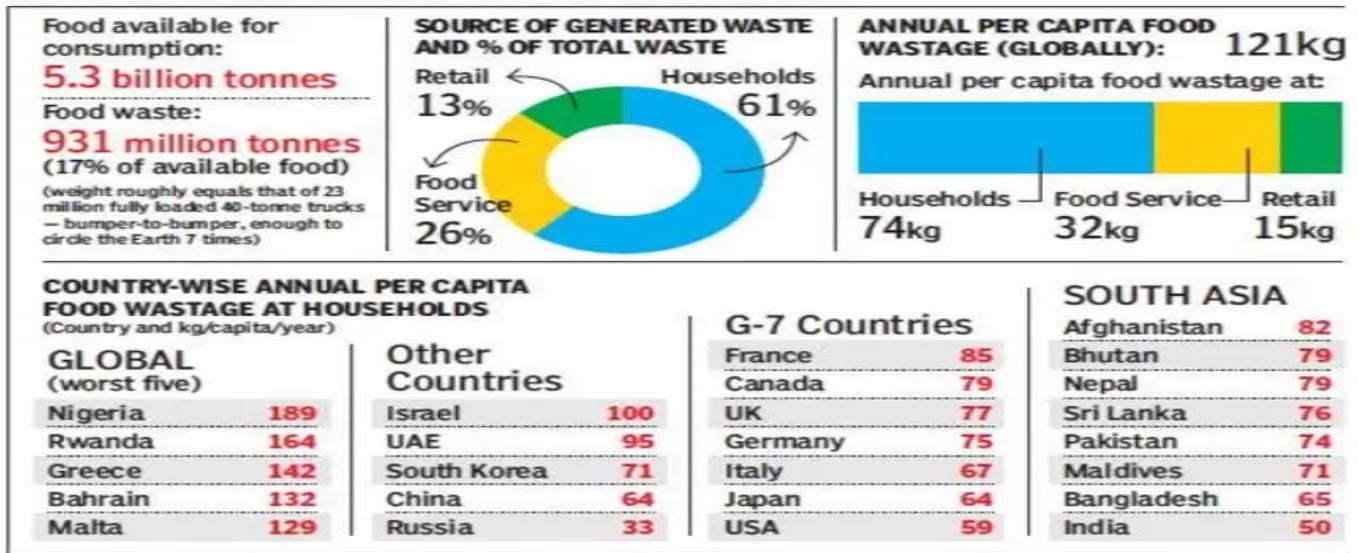| GLOBAL (worst five)		Other Countries		G-7 Countries		SOUTH ASIA	
Nigeria	189	Israel	100	France	85	Afghanistan	82
Rwanda	164	UAE	95	Canada	79	Bhutan	79
Greece	142	South Korea	71	UK	77	Nepal	79
Bahrain	132	China	64	Germany	75	Sri Lanka	76
Malta	129	Russia	33	Italy	67	Pakistan	74
				Japan	64	Maldives	71
				USA	59	Bangladesh	65
						India	50

Fig 1and 2. Household wastage

II.   REVIEW OF NGOs

As we all know that again COVID cases are increasing the same as last year. Instead of wasting these things which are in surplus amount to a person, it can be donated to those people who are in need. An offering for charity, humanitarian relief, or to support a cause is referred to as a donation. Cash, alms, utilities, or items such as clothes, toys, food, or vehicles may all be used to make a donation. All of us know about the NGOs and many of us donate to them as well. Different NGOs work for different causes. Causes can be children, education, food processing, etc. South India accounts for nearly half of all NGO operations. I'll be reviewing some of the NGOs and their work below.

Table 2.1: Reviews of some NGOs

S.No	Donation Organisation	Founded By	How They work?
1.	Goonj (New Delhi)	Anshu Gupta in 1999	➢ Goonj has achieved many strides in bringing value to the society, identified by Forbes named India's greatest rural entrepreneurial association. ➢ Goonj has orchestrated recyclable and reusable products, such as clothing, books, and cereal and export surpluses from those in the urban to the rural centres, under the popular "VastraSamman" programme. ➢ As an experiment, Goonj plans to build on the urban discard as the method to reduce poverty and increase the dignity of every world's poor through continents, economies and nations. ➢ Address the fundamental yet overlooked problems of the poor by helping them develop their own

			ideas and reward them with respect and urban material.
2.	Smile Foundation (New Delhi)	Santanu Mishra in 2002	➢ Smile Foundation, an Indian non-profit organisation, is committed to empower poor girls, young people and women through schooling, creative health care, and market-based programmes of livelihoods. ➢ In order to practise and encourage good governance, the Smile Foundation is to use the right methods and technologies to achieve the perfect SROI. ➢ Connecting corporate competition to programmes for social transformation and sensitising the promotion of the Civic Impacted Change for affluent children and young people in general.
3.	Nanhi Kali	Anand Mahindra in 1996	➢ Venture Nanhi Kali (meaning 'a little bud'), the President of the Mahindra Group, has launched the initiative to educate deprived girls of India. ➢ In the light of rising population rates and reduced levels of female literacy and low participation of women, the venture was started the project was launched. ➢ In several parts of India, particularly rural areas, social problems like child marriage as well as child labour remained general.
4.	GiveIndia Foundation	Venkat Krishnan in 1999	➢ GiveIndia is an India-based non-profit association. This is the online donation portal aimed at channelling and resource making available to trustworthy NGOs in India.

			➢ As an online site, it aims to collect the funds and the investments made by individuals in India as well as the globe. ➢ GiveIndia is in one of India's lowest capital requirements. GiveIndia guarantees that at most 90% of all donations hit the donated organisation.
5.	Clothes Box Foundation (CBF) (Gurgaon)	Naman Ahluwalia and Sajan Abrol in 2014	➢ CBF has been created to create a vision for "clean clothing for everyone," which began in 2014 and aims at redistributing and recycling clothing that the owners no longer need but for the person in need could mean the world. ➢ Our Campaign "Refresh" is our recycling arm, which has been recycled to numerous utility products around 300 tonnes of cotton. ➢ To offer clean clothing to those that need clothes using modern digital technology and social networks via transparent methods.

III. PROBLEM STATEMENT

The product's goal is to reduce wastage of food, clothes, and any other reusable items by donating them to a non-profit organization or directly to the people who are in need through an online donation. The website will ask the donors to register their details into the registration/signup form and then only they will be able to login to the website. And after logging into the web, they can provide the details of things that they want to donate with their location. Similarly, after registering and logging into the web, the receiver will be able to see what items are there for them, then they can ask for them and volunteers will be able to deliver to the receiver's location after registering and logging in. In case the user wants to donate to NGO, they can find details like the contact and address of NGOs and donate to them as well. The website is developed using HTML, CSS, JavaScript, JQuery, Bootstrap, and firebase for the database. It can be accessed on a phone, laptop, and computer system as it is made responsive with the help of bootstrap.

IV. PROPOSED SYSTEM

Food Donation Website offers an interface for people who are searching for a way to give away surplus food, clothes, and other items that can be reused rather than throwing it away. It is developed using HTML, CSS, JavaScript, Bootstrap, JQuery, and firebase for the database. One of two options can be chosen by the registered user, either they can donate the item which is in surplus amount to them or cannot be used by them or they can avow for the contributed items. Firstly, users can log in to the website after successfully signing up for the website. After logging in, they will find services in the navbar, and in-services dropdown menu, there will be donate anything, receive anything, and volunteer. One can choose what service they want to take from the website. If they want to donate an item, then they will have to provide details like their address, item name, quantity, and other mentioned details and press donate button. The volunteer will pick up their items. All their item details will be saved in the database which will be firebase. And if any user wants to claim any item, they will go to receive anything option in the dropdown menu of services and can see the items list and can claim for them. Volunteers will deliver items to their location. And in the volunteer option of the dropdown menu, any person willing to take part or want to join the revolution of change can join by sharing his/her details with us.

The modules of the website are:
1. DONOR
2. RECEIVER
3. VOLUNTEER

It also contains one webpage listing details like their name, cause, address, and contact of some NGOs near our location if someone wants to donate something to the NGOs. They can simply contact that NGO and donate there as well.

V. WORKFLOW
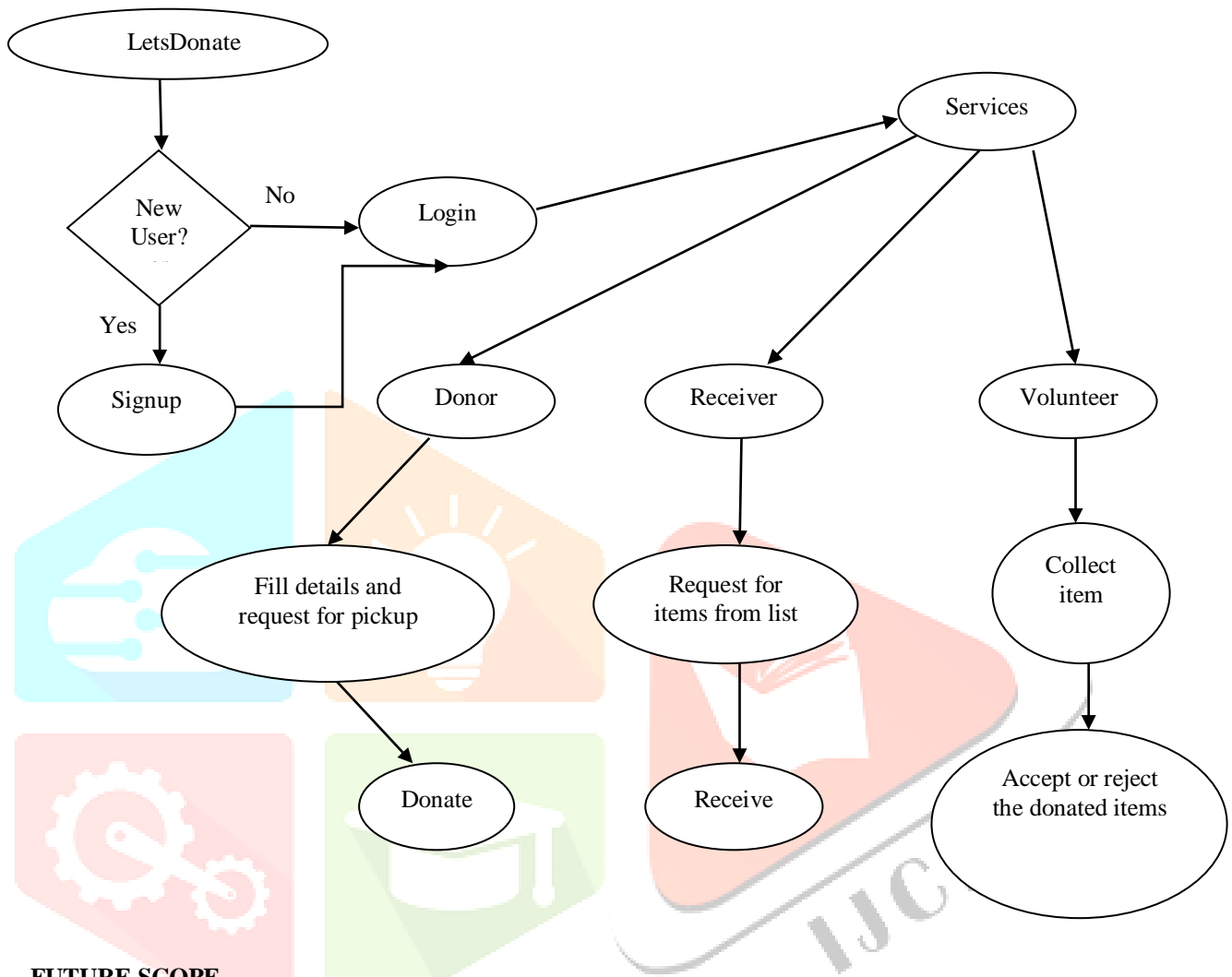
VI. FUTURE SCOPE

Our common necessities for everyday life include food, clothes, stationary and many such items. Some people are lucky enough to get these but some find it very difficult to meet the two ends. Thus, this platform called LetsDonate is an initiative to help these people. It aims to reduce the gap between people with superfluous stuff and people who really need it. The platform is meant to increase the reach of people who wish to donate materials like no longer required clothes and left over food. This platform,
in future, will definitely help in satisfying the needs of poor people in their everyday lives. The food wastage will definitely be reduced as this platform focuses on the idea of donating food. We are living in an era where people are already facing problems like unemployment and poverty. The platform will highly focus to help such people and also contribute to help them take a step towards education by also letting the donors to donate stationary items. The donors could donate used clothes, old and new books and everything they wish to. This will also inculcate kindness and benefit those in real need. Also, if superfluous materials are thrown away as waste, they just lead to an increase in heap of garbage and most of them are also non bio degradable.
Globally, one third of all food produced is wasted, which would be enough to feed 3 billion people according to a study by the United Nations in 2011. This is especially problematic at a time when so many people in the world are suffering from starvation or malnutrition.
Thus, this idea has a great future scope and will be of great help if implemented in real life.

VII. CONCLUSION

Since its outbreak in early December 2019, the emerging coronavirus disease COVID-19 has posed a major and urgent threat to global health and again its confirmed cases are more than 1 lakh per day. One of the major reasons for migrants' movement during covid-19 from Metro cities like Delhi, Maharashtra, Kerala, etc to their hometown is scarcity and unavailability of food. Right now, it is not feasible in such a scenario of Covid-19 to go to the NGOs and then donate there. So, there is an extremely huge demand for an online donation system so that people can donate online and only a single person who will be the volunteer will for pickup and for delivery also.

VII. REFERENCES

[1] SCHNEIDER, FELICITAS. "THE EVOLUTION OF FOOD DONATION WITH RESPECT TO WASTE PREVENTION." *WASTE MANAGEMENT* 33.3 (2013): 755-763.

[2] Bierma, Thomas J., Guang Jin, and Christy N. Bazan. "Food Donation and Food Safety: Challenges, Current Practices, and the Road Ahead." *Journal of Environmental Health* 81.10 (2019).

[3] https://goonj.org/

[4] https://www.smilefoundationindia.org/

[5] https://www.nanhikali.org/

[6] https://www.giveindia.org/

[7] https://www.clothesboxfoundation.org/

[8] Li, Qing. "Research on impact factors for online donation behavior of bank customer." *The Journal of Finance and Data Science* 3.1-4 (2017): 13-19.

[9] Davis, Lauren B., et al. "Analysis and prediction of food donation behavior for a domestic hunger relief organization." *International Journal of Production Economics* 182 (2016): 26-37.

[10] Osner, Robin. "Food wastage." *Nutrition & Food Science* (1982).

[11] Mejia, Gonzalo, et al. "Food donation: An initiative to mitigate hunger in the world." *2015 Meeting Urban Food Needs (MUFN) Programme, July 1, 2015, Rome, Italy*. 2015.