

Food Donation Portal

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Abstract— The donation of food that continues to be edible will be seen as a selected application of urban mining as food is recovered for its original purpose - human intake. There are many projects enforced worldwide however owing to an absence of information, scientific literature concerning the subject is rare. This paper summaries in brief the evolution of food donation activities and offers a medium that connects donors with NGOs. An idea for a food donation network is presented and impact on society through this medium is mentioned.

Key words: Non-Profit Organization (NGO), Third Party Vendor (TPV), Food Donation, Wastage

I. INTRODUCTION

Food donation portal is internet-based application that provides a platform for donating leftover food to all needy people/organizations. The portal is shown to be an effective means of donating food to organizations, etc. over the internet. In highly populated countries like India, food wastage is a big issue. The garbage bins, streets and landfills have ample proof to prove it. Canteens, marriages, restaurants, social and family get-togethers and functions expel out so much food. Food wastage is not only an indication of pollution or hunger, but also of many economic problems. The high standard of living has resulted in the wastage of food. Because of quick changes in habits and lifestyle. Instead of wasting food we can put them in use by donating them to various organizations such as old age homes, orphanages, etc. The product is an internet-based website application that basically aims at charity through donations.

Many people, institutes wish to donate things to needy organizations. Also, many organizations wish to ask for various things required by them such as clothes, food grains, utensils, etc. But there is no source available through which they can satisfy their requirements. Thereby, an web based application has been developed through which people can donate food items as per their capacity and the application also allows organizations to put up their requests, that is items required by them, if any.

II. CURRENT FOOD WASTAGE SITUATION

Food wastage is quick assumptive serious dimensions. The Food and Agriculture Organization (FAO) states a staggering 1.3 billion tones of food are being wasted yearly. The FAO report any states that 1/3rd of the overall international food production is wasted, cost accounting the globe economy concerning \$750 billion or 47lakh crore. This horrifying increase in food wastage is generating approximately 3.3 billion tonnes of greenhouse emission emissions, thereby severely impacting the atmosphere. The wastage of rice specially has serious ramifications for the atmosphere as decaying rice emits methane, a potent heating gas.

Food wastage is a problem on international scale. By report of National Resources Defense Council (NRDC), 40% of the food goes cooked-over within the United States, whereas in Asia, India and China cause a loss 1.3 billion tones of food wastage each year. In terms of overall waste - agricultural manufacture, poultry and milk - India ranks seventh, with the Russian Federation at the highest of the list.

III. FACTS CONCERNING HUNGER IN INDIA

Largest India is home to the most malnourished and hungry population within the world

- 15.2% of our population is malnourished
- 194.6million folks go hungry everyday
- 30.7% of children below 5 are under-weight
- 58% of children stunted by 2 years age
- 1 in 4 kids undernourished
- 3,000 kids in India die daily from poor diet concerned illness
- 24% of under 5 deaths in India
- 30% of neo natal deaths in India

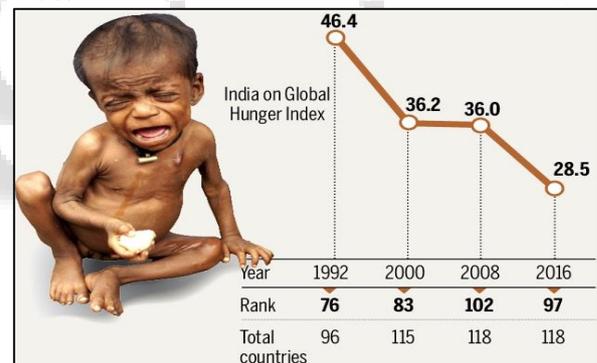


Fig. 1: Facts Concerning Hunger in India

IV. EXISTING SYSTEM

In the existing system restaurant or company or institutes either waste tons of food daily or they have to search for any charity which needs the food. This involves lot of efforts of calling various charities, contacting them manually.

A. Project Concept & Product (Details of product)

Food wastage reduction through donation” product is developed as a good means that of donating things to organizations (Charities or NGOs), etc. over the web. It shows the potential for avoiding the wastage of food.

This application is web based, developed using ASP.NET framework and requires internet connection and will provide a platform for donors and seekers after they successfully register into the system. Both donors and seekers have to be registered and authenticated before they can continue using the system for donation purpose (This is required to avoid unwanted registrations). If an institute wishes to donate something, it can send a message in

application. This message will be shown as notification in donations tab to other users (NGOs). This message will be stored in backend in the database (SQL Server). Once a notification is sent, the orphanages who wish to claim the donations can reply to the donor and contact him/her. The user interface of this system will be simple and user-friendly, and the targeted system is web based. At present, we are aiming to avoid the major wastage that usually happens in India and that is foodstuffs. We are expecting to update and refine the same which will help to add up efficiency and utility of the application.

This application mainly consists of 4 actors – Donor, Receiver, TPV (Third party vendor) and Admin. The Donor performs operations like Registration and Login into the System. He can also put up food items for donation and view all donation requests. The Admin and Donor both can view the Receiver’s place or location. The Admin can also monitor and update the database. The Admin and Receiver both can view the Donor’s. The Receiver can also perform operations like requesting for items, viewing requested items and claiming donations. TPV can view any notification from donor and send respective person for transportation of food items from donor to receiver.

The proposed application shall reduce food wastage and also fulfill other requirements like food items of needy organizations.

V. PROJECT SUMMARY & FLOW DIAGRAM

Across the world, there are restaurants, organization, private sector companies that waste tons of excess food everyday. We would like to create a website to establish a link between restaurants and also the charity homes/needy households to modify excess food donation. We can also create a 'goodwill' points/rewards points system for restaurants to get rewarded for such a noble deed that they'll use for his or her own promoting efforts by being a accountable social business further.

There are many restaurants, institutes, company who waste tons of food in their canteen. On the other hand there are charities, who want food daily. The purpose of this project is to fill the gap between the two. We will be developing a common portal for both. Restaurant or institutes will post on that portal if they have some food remaining which can be donated. Charity will daily check for any food availability on the portal. If they find any they can contact respective restaurant. This way project will fill the gap between the food and save food.

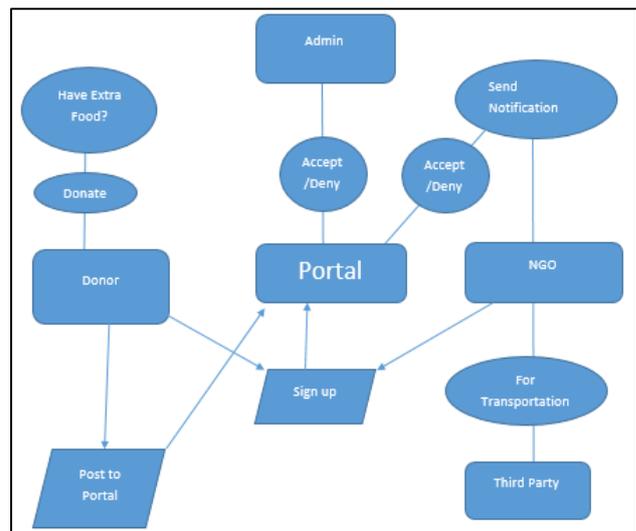


Fig. 2: Flow Graph

There will be separate quality team involved in the system whose primary goal is to test quality of the food donated by organization before it gets supplied to charities. Also we need a third party vendor for commutation purpose, which will be provided by respective charity.

VI. ADVANTAGES

Benefits of Product Donation Donating food create many benefits for your business and our community.

- Reduce storage and disposal fees
- Your donation will help many people.
- Enhance inventory control by reducing hard-to- move inventory and unsalable
- Boost employee morale and foster community goodwill
- Protect your brand integrity
- Put products to good use instead of to waste Accepted Products We are able to accept all types of fresh, dry, refrigerated, and frozen foods.

VII. CONCLUSION

Hundreds of thousands of tons of food are either lost or wasted while millions of people suffer from malnutrition. A plausible initiative is the food donation portal in which large retail chains and potentially other organizations can donate food. This food is collected and delivered by Third Party vendor to NGO in need. Food donation portal will help thousands of people that suffer from starvation and also consume food that are wasted with no reason.. As consequence, research and actions are needed to improve the efficiency of food donation portal.

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