



ZERO HUNGRY PEOPLE FACILITATING PLATFORM

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Abstract: A cycle of hunger and food waste seems impossible to stop. Food Waste, Food Security, and Food Justice are the three principles that govern the Red Cross's work on the relation between food and health [1]. When we consider the three principles, there are several facets to the work we could highlight: from our pioneering research that led to the 2011 publication of "The Road to Zero Hunger: A Global Imperative" (a working paper that lays out the relation of food and health and why we must achieve Food Security and Food Justice) [2]; to our partnerships with universities, government agencies, and NGOs (including work in the United States with Feeding America and the Love Food, Hate Waste initiative) unravelling the complicated causes and consequences of the intersection of food waste and hunger [3]; to the development of Zero Hungry People, the online platform/operating system that is designed for volunteers, supervisors, and the served to achieve the aims of the program. (By the way, "Zero Hungry People" is a title straight from the work of the Red Cross)

Key Words: Food Security, Food Justice, Food Waste Reduction, Zero Hunger Initiatives, Community-Based Food Systems.

INTRODUCTION

Hunger and food waste are mutual challenges that reinforce one another in terms of the Earth. The Zero Hunger Persons Support Framework addresses these two challenges through a web platform that connects potential food consumers directly to citizens in need, facilitating the redistribution of surplus food. Individuals and organizations with surplus food can register, log in, and enter information on an item that can be donated quickly [4]. After the petition is submitted, the second administrator of the platform schedules a pick-up at the second donor's site. Real-time presentation retains all changes, adds clarity, and prevents loss of data. The design priorities defense and exclusivity of data; providers produce gate, personalized declarations safeguarding unique details so that the procedure remains trustworthy. The organization will reduce waste at the beginning of its efforts to establish a steady, dignified support line for those who live in poverty by lowering the obstacles to participation and managing food together with agility and respect. Essentially, the Zero Hungry Individuals Supporting System aims to remove excess and regenerate society, promoting responsible social behaviour.

METHODOLOGY

To improve and operate the Zero Hungry Persons Support Platform, the undertaking employs progressive methodologies. Because of the cryptographic and quality assurance transitions, the application was configured and launched on a case-hardened web server, ensuring the confidentiality and reliability of the information. The seed data set includes metropolis, regional designations, and authorized subscribers, all of which were imported into the main relational database to enable operational functionality. To intercede on food contributions and their subsequent routing, a modular back-end architecture was developed. This architecture orchestrates the arrival of gifts, proctor stock degrees, and generates a gathering request via a configurable, event-driven principle. The delicate information concerned is protected by a multi-layer security control, using role-based privileges, multifactor roadblocks, and transit layer encoding [5]. In order to teach operators, supervisors, and transport agents how to operate the transport undertaking, they were offered lectures. While the platform was stabilizing, additional capabilities were introduced, such as a combined Helpdesk and an uninterrupted feedback mechanism to collect and respond to client queries. As a result of the learned suggestion, iterative methods of treatment were developed. Operation of the schedule scanning anomaly, the basic structure review, and empirically approved polish [6]. A system with optimum usability, robust extensibility, and sound credibility has been achieved through combined techniques. Therefore, the main task of the redistribution and contribution of productive foodstuffs is carried out by the Commission.



RESULTS

Conclusions Our Zero Hunger Individual Supporting Structure provides an exhaustive and protective mechanism to overcome two significant obstacles: excessive food and persistent hunger. In all the pilot periods, essential functions, including automation, stringent confirmation of buyers, inventory monitoring, and modular interface, have been performed faithfully and intuitively. Rapid response times, minimal active anomalies, and resilient involvement of food supporters are evidence of full operational readiness [6]. A broader implementation of the Foundation could significantly advance wider objectives, such as reducing food waste's environmentally friendly footprint and alleviating hunger, by cultivating a transparent, community-based model for excessive redistribution.

CONCLUSION

As a calculated response to the double challenge of poverty and food waste, the Zero Hungry Citizens' Support Platform has been set up in Drumhead. It was designed to be robust, easy to scale, and accessible so that local inhabitants could use it at the same level as the whole level. By automating the matching between donors and recipients, the platform is not only preventing excess food from traveling to waste but additionally commits to the unchanged procedure alongside the resilience ethos. Prior to time, prosody signifies a measurable decrease in food excess, while incessant admission to a nutrient is guaranteeing a primarily exposed. The plan for the upcoming cycle includes extending operational access beyond the current limit and integrating a distributed ledger for traceable and secure archives [7][8]. Together with these increases, it is expected that the platform contribution will be increased to alleviate hunger and increase employment.

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BIOGRAPHY

Dr. V. S. Anita Sofia is an Associate Professor in the Department of Computer Applications (PG) at PSG College of Arts & Science, Coimbatore. She has published 18 research papers, including 4 journal articles, and contributed to 5 books and several conference proceedings. Her research interests span IoT, Cloud Computing, and Big Data, with a strong focus on healthcare applications. She also holds a patent for an IoT, Cloud, and Big Data-based wearable healthcare system designed to enhance the healthcare sector.