

COMMUNITY FRIDGE: A CATALYTIC SOLUTION OF A WOMAN SOCIAL ENTREPRENEUR TO SUSTAINABLE DEVELOPMENT GOALS (SDG) TO END POVERTY AND HUNGER

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ABSTRACT

Introduction: Exponential growth of wealth created by internet-driven technological innovation mark our present age. Ironically, the growing number of poor people points to the skewed development due to systemic injustice and inequity. Against the backdrop of food waste and hunger, this paper examines the social value creation of a community fridge, run by a woman social entrepreneur, in Chennai, India; analyses how it catalyzes sustainable development goals.

Methodology: Mixed methods were used to collect data. Personal interviews with the founder, a few staff, and beneficiaries were scheduled, conducted, recorded, transcribed, and analyzed. Secondary sources were such as journals, internet etc., were used.

Results and Discussion: 1. Our study illustrates the easily replicable solution to the global problem of poverty and hunger. 2. Community fridge drives behavioural change: from food wasters into food sharers 3. The study elucidates the catalytic role of the fridge to achieve sustainable development of goals (SDGs). 4. It highlights the social value creation: food saved worth INR 1.80 crores (18 million rupees); 25 tons of toys, books, shoes, and clothes were distributed.

Research Limitation/Implication: This original study, inspires everyone to become changemakers. Though criticized as band-solution, the community fridge is globally useful, relevant, and doable.

The theory used: Effectuation/ Effectual reasoning based on Saras Sarsavathy (2001)

Keywords: Social entrepreneurship, Social value creation, Sustainable development goals, Community fridge, poverty alleviation

Introduction:

The entire world shockingly watched the agonizing ‘March of migrants’ lacking food and water when the Government of India enforced a stringent lockdown to contain the spread of the virus. Amidst the spectators, many compassionate individuals/groups provided water bottles and food packets to quench their thirst and hunger. Similarly during the COVID 19 pandemic, multiple organizations voluntarily distributed food and food grains to the poor. I too was part of a relief time.

While I witnessed the untold suffering of the poor people in the last two years of the Pandemic, I was intrigued by the media reports about the huge amounts of Gold imports and purchases; the stellar performance of stock

markets, and the emergence of new billionaires in India between 2020-2022 in the pandemic time. While Indian lavish fat weddings continue to happen generating tons of food waste despite bans during lockdowns, often I see people collecting morsels of food to exist from trash and dust bins.

Oxfam Report 2021 and World Inequality Report 2022 confirm the inherent contradiction in India. World Inequality Report 2022 states: India is among the most unequal countries in the world, with rising poverty and an ‘affluent elite’. It states that India’s top 10% and top 1% hold 57% and 22% of the total national income respectively while the bottom 50% share has gone down to 13%. (The Economic Times; Dec 09, 2021).

The prevailing COVID 19 pandemic has disrupted our lives; devastated the global economy; destroyed more than 5.5 million people globally and 0.5 m in India. Containment and mitigation strategies such as closing down the borders and lockdowns wiped out livelihood opportunities and worsened unemployment and underemployment crises. The forewarned fourth wave in June 2022 makes Indians panicky. The fresh lockdowns in China and WHO flagging the new SARS-CoV-2 virus XE recombinant variant (The Hindu, April 03, 2023) creates fear and anxiety. The ongoing war Russia-Ukraine war, political instability in Pakistan and the economic crisis of Srilanka aggravate human suffering. War, calamities, disasters, whether manmade and virus, make acute food insecurity crisis. The world food program (WFP) also affirms the above stating that ‘Growing toxic conflict, climate change, disasters, and structural poverty and inequality are the drivers of food insecurity’

The above instances of food paradox- food waste and hunger, deepened by the coronavirus and political and economic crises, led me to search for an innovative solution. From the literature survey, I came to know that many social entrepreneurs are addressing food waste and catalyzing achieving Sute the sustainable Development Goal (SDG) of ending poverty-induced hunger through community fridges worldwide.

Literature survey: Food and Agriculture Organization (FAO, 2021) defines food insecurity as ‘a situation that exists when people lack secure access to sufficient amounts of safe and nutritious food for normal growth and development and active and healthy life’. The world food programme (WFP) shockingly reveals that ‘about 811 million people do not have enough food. Additionally, about 45 million people in 43 countries may face famine which may result in death from starvation or disease’.

And, a multi-agency report (FAO, IAFD, UNICEF, WFP, WHO) of the United Nations (UN) estimates that ending hunger by 2030 is a utopia. It states that in 2020, hunger shot up to 9.9 percent from 8.4 percent in 2019. More than 2.3 billion people (or 30 percent of the global population) lacked access to enough food. Sadly, 418 million undernourished people (more than half) live in Asia’ (UNEP, 2021)

Hunger leads to malnutrition, wasting, and stunting. Children and women are the worst affected by malnutrition. UN report states: ‘In 2020, over 149 million under-fives are estimated to have been stunted, or too short for their age; more than 45 million - wasted, or too thin for their height; and nearly 39 million – overweight.’ (UNEP, 2021)

Food waste poses serious threat to sustainability (Kari, 2021; Taslais, 2021). Food waste is a global challenge with its environmental, social, and economic implications (Huang I.Y., 2021). Food waste also ‘burdens waste management systems and poses a serious challenge to the three planetary crises of climate change, nature and biodiversity loss, and pollution and waste’ (UNEP 2021).

Despite faster economic and industrial growth and technology-driven food production, India is unable to provide food to many food-insecure people, especially children and women. India ranks 101/116 on GHI-Global Hunger Index. At the same time, UNEP 2021 says that 68,760,163 tonnes or 50 kilograms of food per capita per year are thrown away in India. (The Hindu March 29, 2021).

Key facts about hunger in India

India is home to the largest undernourished population in the world

189.2 million people i.e. 14% of our population are undernourished.

20% of children under 5 are underweight

34.7% of children under 5 years of age are stunted.

51.4 % of women in reproductive age (15-49) are anemic

(Source: The State of Food Security and Nutrition in the World, 2020; FAO 2020)

Despite various flagship schemes and efforts of Govt. of India, the problem of hunger and its consequent malnutrition- underweight, overweight persists. Are there ways to solve this problem?

From problem to solution:

Globally, around 1.3 billion tons food produced for human consumption (one-third of food produced) consumption is being wasted (FAO, 2013; Novakova et al., 2021). It is a loss of 2.6 trillion dollars per year (Maisa L, 2021). Food waste is a colossal resource waste; labor, water, and land, fossil fuels needed for processing are wasted (Dott, J., 2020).

Cavicchi et al., (2019) propose that food surplus redistribution is a partial solution to reduce food waste. Others may criticize it as Band-aid solutions to the systemic injustice.

Giaime Berti et al., (2021), through their PAHS conceptual framework, (prefiguration, autonomy, hybridization, and scalability) highlight the transformative potential of food surplus redistribution initiatives. Dou, Z., and Toth, J.D., (2021) argue that only an in-depth understanding high- vs. low-wasting behaviors could help frame policies. Heidenstrøm, N and Hebrok, M., (2021) have established households generate almost half of the food waste. Therefore, we need to understand how and why we waste food at home. Lim, T.-Y et al., (2021) found that responsible food disposition behaviour augments food sustainability. Muñoz, P., et al., (2021) emphasize food waste is a serious threat to food sustainability and harped on behavioural and attitudinal changes regarding food waste. Chalak et al., (2021) concluded that high & low-income groups increased wastage whereas middle-income groups wasted less food. Interestingly they found out an increasing number of diners per 11111 table decreased waste generation significantly.

Poore and Nemecek, (2018) asserted that rotting food waste emits greenhouse gases three times higher than the total emission of global aviation industry. To mitigate food waste three suggestions were given (Papargyropoulou et al., 2014; Patel et al., 2021). Minimization of food surplus and food waste. Secondly to distribute excess food to food-insecure people. Third suggestion is to convert food waste into animal feed.

Similarly, Principato et al., (2018) highlighted three emergent models. The “sharing for money” model (B2C for-profit model) reduces waste and generates revenue. In the “sharing for the community” model – (P2P model) food is shared to the consumers. In “sharing for charity” model, collected food is given to non-profit organizations. Using digital technology such as food sharing apps and web portals, food banks improve efficiency.

Every year 90 million tons of food wasted in the EU (Cicatiello et al., 2016). Hence, in EU, food donation for charitable purposes has emerged popular mode of waste management strategy. However, Eriksson et al., (2020) proposed removal of existing barriers with policy frameworks could make redistribution

easier and more effective for food donors and food banks as well (Belle mare et al., 2017).

The above literature review points out that community fridge has gained traction as a global movement with different modus operandi in European Union and the USA. It is a widely accepted and practiced method to reduce, rescue, and redistribute to the food insecure people. From the literature, we find that community fridge is slowly spreading in India. However, no studies have been done so far on Community fridges in Chennai. This study, in answering three research questions, not only fills research the gap but contributes to the literature.

Amidst growing food waste and hunger caused by systemic inequity, this paper answers three questions. How does a social entrepreneur provide a local solution to the global problem of poverty-induced hunger? How does the community fridge create social value? How does the community fridge catalyze achieving sustainable development goals?

Research Design/Methodology: Mixed methods used- quantitative and qualitative methods were used.

Data collection: Using the qualitative method, a well-structured questionnaire was prepared and sent to the founder. Later two-hour-long personal interview was scheduled and conducted. With prior permission, the interview was recorded, transcribed, and analyzed. And we interviewed some office staff. We carefully observed and listened to the conversations of the people near community fridges in a few places. And we interviewed some places, security guards and beneficiaries. We have exhaustively mined the secondary sources were the internet, newspaper reports, TV channels, and social media- YouTube and Facebook. Journal articles were mined using EBSCO, JSTOR, and Google scholar databases.

What is Social Entrepreneurship? Who is a Social Entrepreneur?

What is Social Entrepreneurship?

Austin et al, (2006) define Social Entrepreneurship as “an innovative, social value-creating activity that can occur within or across the non-profit, business or government sectors” It is the “construction, evaluation, and pursuit of opportunities for transformative

social change carried out by visionary, passionately dedicated individuals”(Roberts and woods 2005, p.49). Martin and Osberg point to three aspects of social entrepreneurship namely: “1. Identifying a stable but inherently unjust equilibrium that causes the exclusion, marginalization or suffering of a segment of humanity that lacks the financial means or political clout to achieve any transformative benefit on its own; 2. Identifying an opportunity in this unjust equilibrium, developing a social value proposition, and bringing to bear inspiration, creativity, direct action, courage, and fortitude, thereby challenging the stable state’s hegemony; 3. forging a new, stable equilibrium that releases trapped potential or alleviates the suffering of the targeted group, and through imitation and the creation of a stable ecosystem around the new equilibrium ensuring a better future for the targeted group and even society at large”(Martin & Osberg 2007 p.35).

While social entrepreneurship is a contested concept, others state that it is a multidimensional model of behavioural phenomenon with operational constraints. And social entrepreneurship defined as “a behavioural phenomenon expressed in the context of Non for profit organization to deliver social value exploiting perceived opportunities (Weerawardena & Mort, 2006, p.25). The authors bring out the outcome of the model with the interaction of sustainability, social mission, and environmental factors with the key entrepreneurial features of innovativeness, proactiveness, risk management.

Social entrepreneurs are “pioneers, pathfinders, and enablers of change” (Bronstein, 2004). They are “relentless in the pursuit of their vision, who will not give up until they have spread their ideas as they possibly can” (Bronstein, 2004, p.2). Drayton says that social entrepreneurs have the same core temperaments of business entrepreneurs. What defines social entrepreneurs is that they ‘a powerful, new, system-change idea.’ Other necessary ingredients are; “creative, widespread impact, entrepreneurial quality, and strong ethical fiber (Drayton, 2002 p.124)”

Dees, G.J (2001) argues that Social entrepreneurs create new opportunities, discover new values for society, and establish innovative ideas. They seek opportunities to change. Taking the key ideas of “value creation, innovation, pursuit of opportunity,

and resourcefulness” of leading economists, Dees highlights the role of change agents of social entrepreneurs as those who:

- “Adopt a mission to create and sustain social value
- Recognize and pursue new opportunities to serve a social mission,
- Engage in a process of continuous innovation, adaptation, and learning,
- Act boldly without being limited by resources currently in hand, and
- Exhibit heightened accountability to the constituencies served and for the outcomes created” (Dees G, J., 2001).

In his seminal book *Social Entrepreneurship*, Nicholls (2006) states that sociality, innovation, and market orientation are the core elements of social entrepreneurship. Similarly, Shukla (2020, pp 29-30) highlights another 3 common characteristics of Social entrepreneurs: 1. They are driven by a Social mission and address existing social problems. 2. They approach the problems differently, interpret them in a newer way and devise solutions that are more insightful and effective. 3. They use entrepreneurial strategies to solve social problems. Profit maximization and value capturing do not drive them. They are focused on social impact and social value creation. Social entrepreneurs are ‘like currents in dynamic, changing the very fabric of the society with their social impact. They swing into action due to the wellspring of empathy’ (Bornstein/Davis, 2010, p.117). They create “innovative solutions to immediate social problems and mobilizes the ideas, capacities, resources and social arrangements required for sustainable social transformations”(Alvord, Brown, & Letts, 2004, P.262). They are “someone who targets an unfortunate but stable equilibrium that causes the neglect, marginalization, or suffering of a segment of humanity; who brings to bear on this situation his or her inspiration, direct action, creativity, courage, and fortitude; and who aims for and ultimately affects the establishment of a new stable equilibrium that secures permanent benefit for the targeted group and society at large” (Martin & Osberg 2007 p.39). They “innovatively combine resources to pursue opportunities to catalyze social change and /or address social needs” (Mair and Marti, 2006). Social entrepreneurs try to resolve social problems with innovative ideas, passion, and

commitment. Imaginatively they come out with creative, path-breaking, and sustainable solutions. In our case, we focus on a woman social entrepreneur's passion to reduce food waste and mitigate hunger through community fridge

Up to now, we have discussed in the backdrop of food paradox, the prevailing COVID 19 pandemic, disasters, and socio-economic-political crises can aggravate food insecurity. Many social entrepreneurs have made a concerted effort to resolve food insecurity through the community fridge movement across the world. And they create wealth from waste.

In the following pages, the authors present a panoramic view of the community fridge movement globally, nationally and put a spotlight on the community fridge (Ayamittu Unn) run by Dr. Issa Jasmine, in Chennai, Tamilnadu.

Community Fridge: A Global Movement of a caring world

"A Community Fridge is a space where everyone can share surplus food, including donations from local food businesses, producers and households."

Shelterforce magazine notes that "community fridges seem to have discovered a sweet spot in service delivery: close enough to feel the warmth of shared humanity, but far enough to avoid a sense of resentment or burden." Community Fridge creatively solves the global problem of hunger and poverty institutionalized by systemic injustice, inequity, and fast-paced globalization. In the world of 'throwaway culture, as Pope Francis calls it, the fridge stands out as an icon of compassion and caring.

In 2015 the first community fridge was set up in Germany (2015) and later in Spain. Many community fridges have mushroomed during the Pandemic. Freedge.org provides mindboggling statistical details on the worldwide network of community fridges, various organizational setups and impact of their mission of creating a hunger-free world. Philanthropists, NGOs (Non-profit model), business people, and even some municipalities run the fridges to reduce food waste and to feed the hungry. Find below a snapshot of the community fridges network across the globe.

Table; 1 Community fridges across the world

Project Network	Country	Website details and Main Contacts (email, IG, FB, website, linktree or other)	Location type (church, storefront, etc.)	Details (project)
Freedge	US	freedge.org	Network	10
Nevera Solidária	Spain	http://neverasolidaria.org/en/solidarity-fridge-network/	Network	14
FoodSharing	Germany	https://foodsharing.de/	Network	500
Hubbub	UK	https://www.hubbub.org.uk/the-community-fridge	Network	50
Bon App	Canada	http://map.bonapp.ca/	Network	4
Community Fridge Dubai	UAE	http://communityfridge.org/search	Network	70
Les frigos solidaires	France	https://www.identites-mutuelle.com/lesfrigosolidaires	Network	24
Feed the need KSA	Saudi Arabia	http://feedtheneedksa.com/	Network	19
Bern isst Bern	Switzerland	https://foodsharing.de/	Network	8
Partage ton Frigo	France	https://www.partagetonfrigo.fr/#ht-about-us-section	Network	25
Feeding India	India	https://www.feedingindia.org/happyfridge	Network	68
In Our Hearts NYC	USA	@iohnyc	Network	80

(Source: <https://freedge.org/>)

What is admirable is the enormous time, energy and resources devoted to creatively networking with different actors. To illustrate this let us take the example of **foodsharing.de**- a community fridge movement in Germany. Using internet technologies, they have 'decentralized and democratized the logistics of food rescue and redistribution through peer-to-peer gifting' (Morrow, 2019). Networking with various stakeholders, they endeavour to change the 'throwaway culture' of people into caring communities.

Table: 2 Foodsharing.de (Germany)

Foodsharing.de	
Food shared	6,42,24,038 kgs
Companies involved	10,925
Volunteers involved	1, 12, 364
Registered food sharers	4,46,602
Online food baskets	2,19,658
Food rescue per	4,740

(Source: foodsharing.de)

Having looked at the global phenomena, let us focus our attention on India's community fridge movement and later community fridge at Chennai and their mission of making India Hunger-free.

Community fridge in India.

Following the global trends, many business people, NGOs/Trust, individuals, and volunteers run community fridges in big cities of India. For example, **Feeding India**, founded in 2014, became a corporate social responsibility (CSR) initiative of Zomato in 2019. With a wide network of stakeholders, they have made huge strides in their mission of making India hunger-free as enlisted below.

Table: 3 Feedingindia.org (India)

Feedingindia.org	
Food shared	150 million meals
Volunteers involved	27,000
Operational cities	181
Registered food sharers	
Fridges	47
Number of cities	19

(Source: Annual report 2020- 2021 & Indiacsr.in)

Community fridge in Chennai. In the following sections, the authors discuss in detail

a community fridge - **Ayyamitu Unn**- run by Dr. Jasmine, founder of The Public Foundation, in Chennai. Though there are other community fridges run by foundations such as Thecal foundation and No food waste in Chennai. However the authors discuss at length only *Ayyamittu Unn*.

Chennai- a densely populated city with an estimated population of 11.5 million- is the capital of Tamilnadu state, India. It has the largest population of 90,000 migrants. Chennai displays two India- IT tech hubs, automobile hub propelled by corporate rich India marked by skyscrapers and multistoried buildings amidst a vast number of slums defining poor India. In other words 'it is an island of prosperity surrounded by an ocean of poverty

The name of the fridge 'Ayyamitu Unn' is taken from *Athichoodi*,- a Tamil poem, captures everyone's imagination. *Ayyamitu Unn'* means, "share the food with the needy before you eat."

Dr. Jasmine is an orthodontist by profession. She holds a diploma in Hospital Administration & Medical Informatics and has been trained in Aesthetic Dentistry from NYU. She is a multitasker, a creative person, and likes to take up different challenges. Running a community fridge is not her primary job.

In her interview with me, she said, "We are capable of feeding a lot of people. But, we are not bothered about this. We waste a lot."

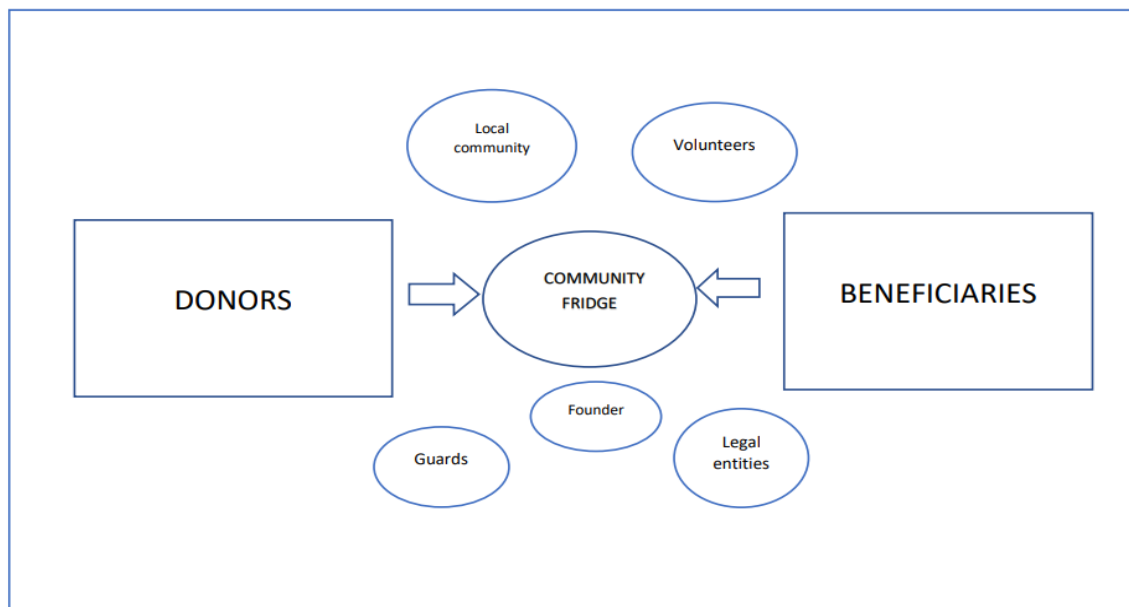
The idea: I asked her about the inspiration for this idea. She replied: "If food is left over, we refrigerate it. People do not throw food immediately on the same day. The next day they may throw it. Some give religious connotation to food as 'deity' - *Anna Lakshmi*.". Why not apply the same concept to the community fridge? What they do at home, they can easily do in the community fridge. Moreover, with one or two leftover meals people may not spend time looking for a needy person. Therefore, the fridge becomes a medium or a meeting point connecting the donors and the beneficiaries as well. Donors come to give. They can leave the excess "eatable food and other food items" in the fridge from 9.00 am to 7.00 pm. Beneficiaries (any food insecure people of the locality-pavement dwellers, beggars, street children,) come to take the free food with more dignity.

No one will question nor ask for any identity cards or proof.

The Spark: Dr. Jasmine narrated to me an incident. After installing the first fridge, she scheduled inauguration on Aug 27, 2017, in Besant Nagar. A curious onlooker asked her, why have you kept the closed fridge on the roadside? She explained to him. He was moved. He left the place. Soon he came back with food items and donated them to her. She told him the fridge will be opened after 3 days. But he replied: why do you wait for auspicious days to

start such a wonderful work? Hence, the first fridge was inaugurated 3 days before schedule.

Need for the fridge: She believes the fridge addressed the food paradox: the co-existence of the ‘problem of plenty of waste’ and ‘problem of hunger.’ With her personal experiences of sharing surplus food with neighbours, she says we can easily identify needy people by taking time out. She warns us: “Never go by appearance.” Having said that, let us look at different stakeholders of the fridge.



Dig: Community fridge

Source: Authors

Guard: A paid guard does the critical role of checking the quality of shared food and verifying expiry dates etc. Interacting with the donors, he ensures their shared food is of good quality, eatable, sealed, and neatly packed. “The donors have to make an entry in the register before they leave, and the guard checks if food is fit to consume. We don’t want people falling sick,” she asserts.

Volunteers: Volunteers are the key drivers of the project. Depending upon the need, they get remuneration fully or partially. They invest time and effort to check, monitor, and ensure the smooth operation of the fridge. Further, they have to resolve if any challenges arise in consultation with Managing Director.

The role of Dr. Jasmine: She nurtures this initiative. She interacts with volunteers, community leaders, and with Greater Chennai Corporation Officials to ensure seamless operation of the fridge. She networks with manufacturers, distributors, retailers, hotels, wedding hall owners, and corporate companies to gather food before it goes to the waste bin. However, she says, “I am not interested to collect leftover foods from marriage halls, restaurants, etc. Neither, I am interested in numbers. My sole aim is to reduce food waste and share the food with the needy. I am interested in behavioural and attitudinal change.”

Community participation: She strongly believes that the community must take

complete responsibility for the daily operations and sustainability of the fridges. She strongly believes only community could drive any desired behavioural change. For example, she has trained people to take only two packets though there may be many people at home. If more food packets are needed, they must come and pickup. Therefore, near the vicinity of the community fridge, one does not see overcrowding and fighting, which is a huge transformation. For, in India, usually we see a lot of fighting and shouting at any food distribution points.

“I just started this with no expectations. But, the overwhelming response of the people gives more hope than I believe. And every time I also encounter challenges”, Dr. Jasmine happily recalls.

Challenges:

In running 11 community fridges across Chennai, she faces many challenges such as volunteers and financial constraints, yet she overcomes them joyfully.

Volunteers: Getting committed and passionate volunteers is a challenge. After volunteering for some time, they move out looking for better jobs. Continuous training of the volunteers is a huge challenge and costly as well.

Financial Challenge: Ensuring the local community’s participation in the operation and sustainability of the mission is yet another challenge. For, installing and maintaining a community fridge is expensive.

In spite of the challenges, the results obtained are relevant, meaningful and inspiring, and life-transforming.

Results & Discussion:

Food waste is an insurmountable problem with its socio-economic-environmental consequences. Food waste contributes to the ever-growing mountains of solid waste in every city and town. However, the Community fridge- a sparkling idea, demonstrates the creative power of a woman social entrepreneur to innovatively solve the problem of food waste and end the problem of hunger in the wake of market and Government failures. With creativity and passion, she has offered a local solution to the pestering global problem of poverty and hunger. She has demonstrated that everyone can become a changemaker with a simple, doable, easily replicable idea

individually or collectively. Multi-sectoral interventions from diverse institutions- religious, political, educational-, government policies, and NGOs can add momentum to the movement and create social value. The public foundation website enlists wealth created from waste running 11 community fridges since 2017. The founder also confirmed the data of enormous social value creation.

Social value creation. It is broadly defined as “something of value for society” (Dietz and Porter, 2012; Domenico (2010, p. 695). Leading authors (Dees, 1998; Dees & Anderson, 2003; Peredo & McLean, 2006; Zahra et al., 2009) argue that creating social value is a defining characteristic of social enterprises. Auerswald (2009, p. 55) claims social value is captured beyond indices of market transaction, in terms of non-financial indices such as reputation- personal and ethical. It is measured in terms of expansion of human capabilities and enhancing human capacities as proposed by Nobel laureate Amartya Sen. Social entrepreneurs create impacts on people and the planet unlocking human potential and enhancing or preserving the inherent value of human lives. Besides community, Dr. Jasmine has initiated many activities to create social value such as corona relief activities, Food pantry.

Corona Relief: Stringent lockdowns and social distancing made it impossible to operate the fridge. Therefore, with permission from Greater Chennai Corporation Officials, she ran the community kitchen and started feeding them following the Standard operating procedures of COVID 19. Later she distributed ration kits to poor people.

Food pantry: Since 5 September 2021, Food Pantry encourages people to leave uncooked food items. Or buy extra groceries and leave them there for the needy.

ME TIME: She propagates ME TIME, especially for women to ‘self-care.’ ‘Me time’ is very crucial for Indian women and mothers, the epitome of sacrifice, who spend their entire lifetime ‘caring for others and doing “free labour” of household activities. Daily ‘an hour’ of ME TIME lends an opportunity to learn new skills, talents, and competencies. More

importantly, this would rejuvenate and revitalize them with rest and relaxation.

1. **Innovation:** Dr. Jasmine proudly says that could save food worth INR 1.80 crores (18 million rupees) and redistribute it to people. The fridge not only addresses food insecurity but helps to save money and augment family savings. Otherwise, they would spend hard-earned money to buy food, vegetables, or groceries. With free food and saved money, children could continue their education.

2. **Sociality or Social benefits:** Through the community shelf, kept near the fridge she has collected a lot of useful things. More than 25 tons of toys, books, shoes, and clothes were collected, reclaimed and redistributed through different Community shelves has reduced 25 tons of waste and landfills. Interestingly, it has extended the life cycle of the discarded items. Waste becomes valuable. And it fulfills someone's needs bringing psychological satisfaction and happiness. For example, the notebooks and the toys would bring immeasurable joy, happiness, and satisfaction to the poor children. And enable them to continue their studies. In a world of "use and throw culture," the fridge installs the value of "reuse".

3. **Principles of Sustainability:** Through the fridge and community shelf, she has brilliantly employed the principles of sustainability: Rethink, Refuse, Reduce, Reuse, Repair, Regift, Recycle. In addition, she has added value to the discarded products, extended their utility, and reduced the mountains of solid waste. In the long term, it will reduce stress on natural resources and the environment.

4. **Replicability:** I am reminded of the "nudge" for common good by Richard Thaler, Nobel laureate. In a way community fridges 'nudge' and "makes easy" without forcing. There are umpteen examples of youth feeding people risking their life during COVID 19. Using the power of social media networks, the present youth can implement community fridges in local communities either individually or collectively and transform every household from **food wasters into food sharers**. Thus every local community can become change-makers with changed behavior and attitude

5. **Model of caring communities:** Community fridge demonstrates the power of community participation, support, and collaboration in making the project sustainable. It is a testimony of the power of collective action, synergized through networks of people via social media. We live in a conflict-ridden and deeply polarized world. Various divisive forces make "us" and "they". Hence, in general, people live with minimal human interactions. They find solace living in virtually connected networks driven by the internet. A community fridge can build social cohesion and bring out people from isolation, especially the elders, who feel aloof, and left alone. Engaging in this community activity to create a hunger-free local community can give unfathomable joy and greater sense of purpose and fulfillment. This creative act may nurture a sense of community, bonding, and belonging. Above all the community fridge can nurture a culture of sharing, caring, and bearing emerging from empathy and compassion. Eventually, each one becomes responsible for the other and contributes to growth and destiny. Everyone, thus, can contribute to the vision of sustainable development goals in their locality.

6. Sustainable development Goals (SDG):

In September 2015, 193 countries agreed to the framework of 17 Sustainable Development Goals, and 169 targets embarked on an ambitious journey of transforming the world by 2030. Sustainable Development Goals(SDG) are a plan of action for people, planet and prosperity with a pledge that no one will be left behind. It also seeks to strengthen universal peace in larger freedom'. Building on the Millennium Development Goals, SDG, which came into effect on 01st January calls for deeper commitment to end poverty and hunger, protect the planet and ensure prosperity for all. SDG recognizes that eradicating poverty in all its forms and dimensions, including extreme poverty is the greatest global challenge and it is an indispensable requirement for sustainable development. SDG focus on the path of the three dimensions of sustainable development: the economic, social and environmental (un.org).

SUSTAINABLE DEVELOPMENT GOALS



Source: UN.org.goals

The preamble proclaims its vision of people, planet, and prosperity:

The interlinked and integrated nature of SGS is critical success factors. And SDG success depends on leveraging networks, partnerships, and solidarity through collective actions.

‘The State of Food Security and Nutrition in the World’ report raises concern about Sustainable Development Goal -2 (SDG-2) Zero hunger by 2030 will be missed by nearly 660 million people. Similarly, (SDG 12.3), i.e. halving food waste and food loss will be delayed further. Of these, some 30 million endure the pain of the pandemic's lasting effects.

In this pandemic context, we can explore how the catalytic role of the community fridge to achieve nearly seven goals out of 17 SDGs. For example, a community fridge demands behavioural transformation from food-wasting to food sharing. Thus fridge catapults global effort toward reducing No poverty (SDG 1) and Zero Hunger (SDG 2) and contributes to Good health and wellbeing (SDG 3). Indeed, with a possible delay to reduce poverty and hunger by half by 2030, the fridge catalyzes global efforts to become food sharers than food wasters. Indeed change in behaviour and attitudes will lead to responsible consumption and production (SDG 12). A simple act of leaving the extra food in the community fridge and

unwanted items on the shelf reduce mountains of solid waste. Not only that, we have seen above the massive impact of behavioural change. With increasing urban migration against the shrinking job opportunities, the fridge contributes to building sustainable cities and communities (SDG 11), letting in motion the principles of sustainability, though maybe momentarily. As Scherhauser (2018) said, sharing excess food can protect the environment, and planet and reduce landfills. UNEP 2021 states that food waste and food loss generate the deadly greenhouse gas methane. Thus, the community fridge is an icon of climate action (SDG 13) that mitigates the emission of greenhouse gases. In the backdrop of COP 26, community fridge is a climate action to save the world and its depleting resources. All the above-mentioned benefits of a community fridge would improve our life on earth (SDG 15) making people more responsible and sustainable in using scarce natural resources.

Practical insights/inferences of the study: Food Waste Index report 2021 of UNEP estimates that 931 million tons of food are wasted every year. Nearly 570 million tons of this waste occurs (61%) came from households, 26% from food service, and 13% from retail.’ One of the important insights from the study is that food waste especially household food

waste is completely preventable. What is needed is to create behavioural and attitudinal change. To achieve this we need to come up with various interventions, strategies, and alternatives. Secondly, the community fridge is easily doable and replicable. Anyone can with a group of friends replicate the idea and create social value. What matters is creativity and passion.

Practical Implication of the study. In a world of growing consumerism and throwaway culture, drawing inspiration from the social entrepreneur, everyone can become a changemaker and create social value for others. If one social entrepreneur could make a huge difference in the lives of others, imagine the transformative power and potential if many more join in this noble cause? In India, if everyone takes one step forward to reduce food waste and share with the needy, the resulting 1.37 billion steps would transform India: from a hunger-stricken India to a hunger-free India. It is better to light a lamp than blame the darkness. So without criticizing it as a ‘band-aid’ solution to the deep-rooted crisis of poverty & hunger, and without ‘hero worshipping’ the social entrepreneur, each one can do something to create social value for the needy and the vulnerable. With these key insights, let’s conclude with a few remarks.

Conclusion:

Against the backdrop of enormous food waste and hunger caused by inequity and food injustice, the authors raised and answered three research questions. How does a social entrepreneur provide a local solution to the global problem of poverty-induced hunger? How does the community fridge create social value? How does the community fridge catalyze achieving sustainable development goals?

Using qualitative methods and using secondary data, the authors have uncovered the immense social value creation of community fridges for people and the planet. This paper has showcased the creative power of women social entrepreneurs to provide an easily replicable local solution to the global problem of poverty and hunger. Community fridge highlights the concerted and collective effort of local communities to reduce, rescue food waste, and redistribute the food to the needy in a sustainable way. It simultaneously addresses

two issues of food waste and hunger and the socio-economic, and environmental consequences arising out of food waste.

Further, the authors have adequately illustrated how community fridges catalyze sustainable development goals; poverty alleviation, a hunger-free world, reduce food waste, responsible consumption, and sustainable cities and shines brightly as an icon of climate action. Importantly the paper creates awareness to reduce household food waste. Changing its wasteful behaviour and attitude, every household must become from food-wasters to food sharers. Gandhiji said, “ You must be the change you wish to see in the world.” A simple change in our behaviour can lead us to save humungous resources and create long-lasting impacts in the lives of others. Thus everyone can become changemakers as advocated by Bronstein.

Applying the words of Mother Teresa to the initiative one can say: “**We know only too well that what we are doing is nothing more than a drop in the ocean.** If the drop were not there, the ocean would be missing something.” I am convinced that together we can make difference and contribute to creating a sustainable world and hunger-free world.

Suggestions and recommendation/limitations/Implication

Instead of waiting for some ‘messiah’ to solve the problem of hunger, small groups can proactively contribute to sharing food. Many local communities and welfare associations of gated communities can easily implement community fridges. And using social media and apps they can creatively distribute edible food. Wherever and whenever possible local communities can collaborate to make the delivery of the Government of India’s flagship programmes- such as mid-day meals for school children, free food grains for the below poverty line families-accountable. And earnestly contribute to the efficient, effective, corrupt-free, scam, and scandal-free.

Similarly, groups of people could make the Public distribution system function well and make its delivery more transparent, accountable, and corrupt-free. Importantly, civil society must do social auditing of the godowns of the Food Corporation of India (FCI) to ensure the food grains are distributed to the needy instead of getting rotten or eaten by rats or wasted in rains and sun Further, civil

society and Non-governmental organizations must create mass awareness about National Food Security Act (2013) that guarantees food as an entitlement or right. This act provides subsidized food grains to 1.2 billion Indians ie two-thirds of the Indian population.

Future researchers can study other aspects of the community fridge. And they can study how to address food insecurity and systemic food injustice going beyond community fridges.

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