

# **Repurposing of Food Waste by NGOs in Mumbai and Thane, India**

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# 1. Introduction

Wastage of food is a global phenomenon which is of a growing concern for governments and organisations such as the United Nations, the FAO etc. with each passing year. It is especially relevant in a developing nation as India, because the country is on the cusp of maintaining its traditions while at the same time witnessing an improved quality of living along with seemingly unending food options in the form of restaurants, snack shops, tiffin services as well as the surge of food delivery apps over the last few years in major cities like Mumbai and Thane. The country has a strong community-oriented culture, which includes treating a guest with immense hospitality which also hides behind a reason to portray the host as having a stable, even wealthy societal position. When such a host tries to save his reputation while presenting more food than required to his guest, there is a high possibility of wastage, which makes for a highly relevant case to explore the situation on ground and develop solutions specific to the Indian context. Wastage here is in the form of leftover food on plates or as surplus and should not be assumed to be that which is obtained from raw materials prior to cooking.

The research is designed with a focus on viewing the current issue of wastage through the workings of upcoming non-profit organisations. As we shall see later, with the aid of volunteering observations and interviews of actors from three such organisations, we will be presented with not only the specifics of Indian societal drivers of related to food wastage, but also those which are seemingly unnoticed and occur in the process of donating excess leftover food. These include the hidden fields of food packaging and storage, the use of community fridges, corporate intervention and a few more. Based on the data obtained, the paper analyses its findings with current understandings and suggests the existing salient highlights as well as areas for improvement as observed within three organisations studied; The Robin Hood Army, Zomato Feeding India and Arham Yuva Seva Group.

Main centres for fieldwork were Mulund (a suburb of Mumbai) and Thane, cities which are direct neighbours of each other. Mumbai is renowned around the world as the financial capital of India. It has one of the largest population of inhabitants; 18.4 million residents living in an area stretching out to about 603 sq. km. This megacity generates 8600 tonnes of solid waste a day (Ahluwalia I.J. and Patel U., 2018). Of this, Mulund is a suburb situated in the North-Eastern part of Mumbai. The Thane city ends just when Mumbai officially begins from Mulund. Although unofficial, Wikipedia pegs in Mulund's population at 750,000 inhabitants. While direct neighbours of each other, the major form of separation of both cities is their respective civic administrations; the BMC (Brihanmumbai Municipal Corporation) governs the whole Mumbai region while the TMC (Thane Municipal Corporation) is responsible for administration in Thane. According to the Thane Municipal Organisation (pp. 1–3), the latter is established over 128 sq. km area, home to about 1.8 million residents. Moreover, an estimated solid waste of 650 tonnes per day is generated in the city.

To carry out the thesis successfully, three non-profit organisations were volunteered at; Arham Yuva Seva Group, which was volunteered at in Mulund, Mumbai, while the Robin Hood Army and Feeding India were looked at in various locations in Thane. In addition to field observations and noting down of learnings, interviews with an experienced member from each organisation were conducted for a more in-depth analysis of the current situation of food wastage from the eyes of that organisation. The thesis spanned over a period of six months starting from 22 September 2019, of which fieldwork combined with observations were carried out for three months. Most amount of time was spent

with the Robin Hood Army and Feeding India, with a very short but insightful stint at Arham Yuva Seva Group.

## 2. Literature Review

### 2.1 Background of Food Wastage

Situated somewhere across traditional divisions between social environmental sciences, production and consumption, waste has become an absent presence orphaned from a single discipline. Which means it does not belong to neither category, thus turning into an orphaned presence' that is absent from them. Results of a 2011 study by the FAO on the extent of food waste revealed one-third of food produced for consumption getting wasted globally- about 1.3 billion tonnes annually (Evans, Campbell, & Murcott, 2012, pp. 5-26).

The food service industry is the third largest contributor, at 18 % of food wasted worldwide. Moreover, it is claimed that 13.5 % of these losses are avoidable. This study by Betz et al. (2015) was proposed to provide information about food waste in the food service industry, its reasons and respective strategies for prevention. Upon conducting experiments, some reasons found for waste included portion size, lack of hunger and presence of disliked ingredients. Portion size on the plate, when determined by staff was perceived too large by customers. Starch preparations created most plate waste, while fruits and desserts created the least. The study found that most people (about 57.7 %) took the issue of wastage seriously and about 80 % were aware of the problems it poses (Betz et al., 2015, pp. 218-226). Strategies proposed to counter the problem are to not buy stocks during purchase, employee training to control preparation losses, using photographs instead of ready meals for presentation, use of smaller bowls and surveying consumers for reasons of their wastage using feedback forms.

Upon closer observation, it is seen that food losses occur at the early stages of the supply chain in primarily developing countries, while its wastage and surplus happen in developed ones (Aschemann-Witzel et al., 2015, pp. 6457-6477). However, the statement does not hold true for metropolitan cities, which in themselves could be considered developed regions within the overall developing nation; fast-growing countries such as China (Liu G., 2014) and India which are still developing yet developed in some inward areas such as Mumbai and Beijing are prime examples. Aschemann-Witzel et al. (2015) state that consumers are not as much directly responsible to throw food from their own houses as much as retailers who apply standards to accept or reject foods based on anticipated consumer choice. 'Sub-optimal foods' close to their best-before date and deviate from the desired optimal, foods with highest sustainability impacts (for example, wastage of dairy products, fresh fruit and vegetables creates a demand for land), and food scraps constitute to consumer-related food waste. Sub-optimal foods are considered the largest contributors of food waste. A survey conducted in South Africa shows the influence of status on fresh produce purchase may be higher in low income/educated households. In a Dutch survey, there was a willingness to substitute bread when it was found to be out of stock. Looking at Swedish dairy households, there was considerable influence of food packaging. Around 20-25 % of food was wasted because of packaging issues (like packages being difficult to empty and having passed best-before dates). Another fact observed by Aschemann-Witzel et al. (2015) that there was potentially a stock of items in many households which were reserved for a special occasion but ended up never being used thus eventually thrown away.

In the Indian context, one of the crucial ways food wastage occurs is when a host, in order to 'save face' and show his hospitality, presents great amounts of food before his guest, not all of which gets consumed and thus, is wasted. From the (George, S.K. 2009, pp. 29-47) article, India's hospitality

stems from a spirit of tolerance fostered both culturally and religiously. To people of the nation's predominant faith i.e. Hinduism, hospitality is a sacred virtue. The ancient text of the *Rig Veda* says, 'He is liberal who gives to the suppliant desiring food, wandering about distressed; to him there is an ample (recompense), and he contracts friendship with his adversaries' (The Rig-Veda 2002: 328 [X:CXVII:3]). The *Upanishads* carry the most famous adage that forms the crux of Indian hospitality practices: '*atithi devo bhava*' meaning 'guest is God'.

Contrary to olden times and beliefs, it is apparent that now the country is welcoming diverse cuisines, habits and cooking techniques with each passing year of its development. This has resulted in the growth of the restaurant industry in the country. An increased standard of living and lifestyle changes have also contributed to the phenomenon. Restaurants have been benefitting from India's rapid economic growth, foreign investment, and changing consumption patterns. A combination of economic wealth, widening gaps between the rich and poor and an under-developed waste management pattern has caused an increase in the Urban Food Waste (UFW) in metropolitan cities (Adhikari et al., 2009, pp. 4-21). Wastage occurs in the form of overestimation of consumption capacity by patrons in restaurants, which is not met thereby leaving food outside the plates in consumable condition. The hotel industry being vast, a small percentage is considered at three stars and above. The majority are small, traditional operations sourcing their food locally. It is difficult to put a cap on the restaurant population because a majority is unorganised small outlets. Out of 300,000 Indian hotels, about 100,000 are considered part of an organised hotel sector consisting more than 20 seats and a dedicated menu. Most of the organised sector is situated in metropolitan cities and tourist or business hubs. The country has also been attracting international hotel chains through franchises and partnerships. These chains get placed in the premium (5 stars and above) or mid-range (3-4 stars) segment. Although with globalisation, modern menus include some amount of foreign foods. For a long time, Indians ate food at home and those who ate outside did so from street stalls that are common in the country. At present, Indians have started eating out more. Younger generations are welcoming international food chains and foreign foods. It is estimated that 7-10 % of food expenditure by Indians goes towards restaurants, cafeterias etc. People prefer multi-cuisine outlets where families can try out a cuisine of their liking. The organised restaurant sector is expected to grow at 8-10 % over the next few years due to urbanisation and disposable incomes. Western-style fast food chains have grown at a rate of 15-17 % annually over recent years. A culture of coffee shops has spread all over because of franchises as Costa Coffee, Café Coffee Day, Barista etc. who source syrups, nuts and bakery goods from foreign regions.

## 2.2 Food Waste in Other Research

Hebrok & Boks (2017) conclude the drivers of food waste to be revealing further insights about the perceived values of food (i.e. likeability), households, lifestyles, storage, packaging and food risk. Furthermore, the dominating categories of interventions that must be focused on are: 1) Technology to share, plan and obtain an overview of stock, 2) Packaging and storage that extends shelf-life and 3) Information and awareness campaigns. The field of food storage remains largely unexplored, which brings us to the topic of community fridges; almost nil suggestions exist on how to save food from a shareable fridge, with most studies concentrating on how current looks could be improved. The authors also found wastage behaviours are so entrenched in everyday lives of people that mere education and a provision of best-practice guidelines will not help, rather the focus must be on those intrinsic societal factors which do not presuppose a relationship between knowledge and action.

Schanes et al. (2018) discusses some underlying causes of food waste, which are found to be multidimensional and given as follows, with proposed prevention strategies:

1. **Perceptions of food waste:**
  - a) A lack of awareness – Door stepping campaigns and a wider reach of food wastage data to the masses.
  - b) Generalised acceptance of food wastage as a norm – Communication campaigns informing about the adverse impacts of unconscious wastage.
2. **Cooking practices:**
  - a) Over-preparation of food – Imparting guidelines and cooking skills needed for portion control
3. **Eating:**
  - a) Eating out more in restaurants – N/A
  - b) Large plate sizes – N/A
4. **Leftover management:**
  - a) Leftovers perceived as ‘below one’s level’, or ‘thrift’ – Sharing food.
  - b) Lack of knowledge about shelf-life or how it can be extended – Expressing more explicitly the “Once opened, use within X days” guidance, enhancing existing guidelines.
  - c) Confusion about edibility – Food date labelling.

With the reasons for waste listed out, the paper goes on to discuss their solutions. Information, education and door-to-door campaigns that address specifically the gaps that drive wastage. There is a need to build knowledge among consumers about systematic storage practices and educate them on information about the shelf-life of leftovers. In relation to packaging, re-sealable, easier-to-empty packages in various sizes have the potential to reduce food losses. Economic incentives can push food producers to upgrade their packaging solutions. Finally, they acknowledge the importance of technology as a key tool to tackle the issue but hold the opinion that a direct connection between donors and recipients may not always end with satisfactory results.

Schanes et al. (2018) have also found in their research of the much-hidden social phenomena driving household food wastage. They concluded that households feel a sense of guilt for causing wastage, which is based more on ‘personal concerns’ and financial losses, than a realisation of adverse environmental and social implications of such acts. Furthermore, they note that the good intentions to reduce mentally clash with concerns of food safety and freshness, thus creating an ambivalent attitude towards waste prevention and disposal. Here again the importance of acknowledging an individual as embedded in a peculiar social, cultural and economic structure is to be considered to shape the creation of less wasteful practices.

Evans (2014) describes a highly detailed sociological perspective of food wastage in which he analyses the reason for the generation of surplus food as occurring due to a couple of factors: 1) A collective understanding of society on what is ‘proper’ food which excludes any food regarded to be ‘excess’ or ‘waste’ as ‘improper’ i.e. unfit for consumption, and 2) The quantity of such ‘proper’ food exceeding in quantities than is consumable in households. Their tendency to hold on to surplus food is born out of identities and relations which when revealed would be to their displeasure, after releasing the surplus. Here, this perceived displeasure is attributed to be a result of multiple anxieties, which are regarded as social forces that become routine and normalised in the community due to a continuous set pattern of consumption. This causes a change in the state of the food from ‘surplus’ to ‘waste’. Evans’ (2014) suggestion to this issue is the formulation of organisations which would aid in keeping the donor’s identity anonymous. Another crucial fact pointed out by him is that

surplus food may flow more freely between households when there exists a tangible and meaningful connection between both parties. The key role for intervening agencies here is to strengthen the ties between neighbourhoods.

Further, Evans (2014) provides us with a distinct demarcation between the terms ‘excess’, ‘surplus’ and ‘waste’, since these terms are often applied interchangeably. According to the findings, food becomes ‘waste’ through a linear path, thus ‘waste’ being a consequence of how the food is disposed. Therefore, to prevent food from becoming ‘waste’, tapping into the value chain must occur at stages in which food becomes ‘surplus’, and thereafter likely becomes ‘excess’. A ‘gap’ separates ‘surplus’ from turning into ‘excess’, which is the first step taken by households finding themselves in possession of surplus food. Food does not disappear suddenly into this ‘gap’ but flows out of the value chain into different paths of future acts or ‘conduits’. That which is deemed ‘unfit for consumption’ by households yet can be recovered and used for repurposing emerges out of the ‘excess’ stream proposed by Evans (2014). Bins are mediums which connect the surplus and excess to the waste stream; that food may be placed inside bins for repurposing (for example, dumpster diving). The figure below illustrates the theory:

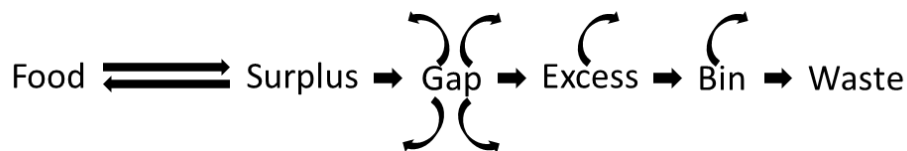


Figure 1: Evans' (2014) food to waste theory. After being deemed as surplus, food enters the ‘gap’, or the first step taken by households.

*Curved arrows represent various possible conduits and uncertainties in flow direction.*

In agreement to Hebrok & Boks (2017), the fact that food wastage is densely interwoven within everyday lives of masses is yet again reiterated by (Gjerris & Gaiani, 2013). To counter the problem, they indicate clearly that the problem, or an awareness of the magnitude and complexity thereof, must be drilled into lives, else it leads to personal responsibility disappearing or indefinitely postponed and one’s problems appearing as someone else’s. Creating a new and viable vision requires a full understanding of the issue and individual responsibilities of each community member, and that a thorough knowledge of local conditions is necessary to act right. In conclusion, Gjerris & Gaiani (2013) suggest that a shift in perceptions of food waste from the present to associating it with moral wrongness will develop the definition of food as a gift to be thankful for, not a resource to be used at will, and develop new narratives of relations between humans and nature.



### 3. Research Question and Objective

Almost no scientific literature exists in the domain of the way surplus food wastage is tackled by non-profit organisations. All that is known is surface-level know-how, which is food is taken from one party and given to another, needy section of society. However, there is not much clarity on the challenges faced, the differences and/or similarities in working mechanisms, which becomes a limiting factor by preventing useful knowledge from flowing freely. Equipped with more field-level understanding on modes of operation of the non-profit organisations, we will be benefitted with the current solutions applied and further discover improvements and upgradations to existing ones so that the scientific and sociological gap is bridged and working made more effective and seamless. Therefore, we would like to identify the working styles of three non-profit organisations: Robin Hood Army, Zomato Feeding India and Arham Yuva Seva Group. All three are based in and around Mumbai and Thane, extending to numerous other regions in India, even on the global scale.

The questions for this research are:

- How is food wastage repurposed through non-profit organisations?
  - At the same time, there are some sub-questions to be asked: What are some salient practices followed by the NGOs, and what are some loopholes that can potentially cause wastage? Do these loopholes have a cultural and societal aspect to them peculiar to the Indian context? Can the current process be upgraded to adapt to the Indian societal working style and metropolitan conditions, so also drawing learnings from comparing the working of organisations?

The objective of the report is:

- To present the challenges that current food waste prevention organisations face in the backdrop of the Indian society, and learnings gleaned therefrom which can be adopted or considered to be pointers by other organisations working in a similar sphere.

## 4. Methodology

### 4.1 Research Setting

The Master's Thesis report is part of the academic curriculum towards fulfilling the course requirements of the degree MSc. Food Technology. It has been carried out under the supervision of Dr. Joost Jongerden, Associate Professor of the Rural Sociology Chair Group at Wageningen University and Research, the Netherlands.

### 4.2 Planning and Methods Used

The thesis was performed over for an overall period starting from 22 September 2019 till 31 January 2020. Since recently, there have been volunteer organisations coming up to tackle food wastage by general masses at events or by restaurants and commercial establishments. Such groups offer to donate any leftover food from the donors and if deemed fit for consumption, the food is served to individual or group who may not have a consistent supply of food. In this manner, food is 'repurposed' while it would normally have been classified as waste. The most popular non-profit organisations i.e. the Robin Hood Army and Feeding India operating in Mumbai and Thane (in my case, only Thane) were chosen because of their exclusive focus on repurposing food for donation to the less-fortunate, with an intention to provide learnings that reflected the best current practices to apply to this domain with a chance to further increase their effectiveness. Arham Yuva Seva Group was chosen because of its practices with Jain traditions that was interspersed in their working, thus giving a unique perspective to food wastage handled by a more religious group. The methods applied in the thesis included active volunteering and making of field notes after the event ended. Volunteering sessions and took place on both days of the weekend with the RHA. Monday sessions were added to those on weekends for a brief period of three weeks with the Arham Yuva Seva Group. Lastly, volunteering activities, meeting sessions, food-grain donations and excess food drives at Zomato Feeding India were carried out; all activities being sporadic with no fixed-time apart from a discussion and majority agreement. It further included an interview session with a key member from each actor, usually in a position to elaborate the ground-level reality of working. For this purpose, a questionnaire was designed which can be seen in the Appendix. In some cases, additional questions were added after the interview. The interviews happened over calling.

As additional data, the remaining weekdays was used to arrange meetings and interviews with restaurant establishments in Thane and Mumbai. The data provided by these are only ancillary and have not been considered in this report.

### 4.3 Societal Relevance

Wastage of food is a global phenomenon which is of a growing concern with each passing year. It is especially relevant in a developing nation as India, because the country is on the cusp of maintaining its traditions while at the same time witnessing an enormous change in food habits of people living in metropolitan cities. Food options in the form of restaurants, snack shops, tiffin services as well as related advertisements and the number of food delivery apps have drastically progressed over the last few years. When paired with a collectivistic society where 'saving face' matters and a host has a tendency to stock up on a larger amount of food than the designated number of guests, there is a high possibility of wastage, which makes for a highly relevant case. Wastage here is in the form of leftover food on plates or as surplus and should not be assumed to be that which is obtained from raw materials prior to cooking.

## 5. Principal Actors

As is the case with many who realise situations only after landing on the field, I too was met with rejections from a number of non-profit organisations; Roti Bank, Mumbai did not respond to my form filled on their website. When I called them up, it seemed they were not too keen to explain the workings of their organisation to me. Roti Bank is the most unique of all non-profits there are to my knowledge in Mumbai and Thane cities; it is run by Mumbai's 'dabbawallas', or men who carry lunch and are identifiable by their characteristic white headcaps. Their management efficacy is renowned throughout the world, it would have been interesting to know how ingenious methods are applied to curb food wastage. I had also contacted India Food Bank twice via mail, though in vain. Then there was 'No Food No Waste', whom I directly called and was answered by a polite lady who informed me that they do not yet function in Mumbai and are present majorly in Southern Indian states. There were many other non-profits to consider but they were mostly dabbling in other areas in addition to countering food waste. Nevertheless, by this time, or precisely by 26 September, four days after coming on the field, I was inducted to volunteer at the Robin Hood Army. The process of joining the organisation was easy. Later on, I got the opportunity to work closely with Feeding India and Arham Yuva Seva Group as a volunteer. In fact, Roti Bank, Robin Hood Army and Feeding India, those I considered to be the major players in tackling food waste, I contacted even before coming to Mumbai because of a premonition that getting in would inevitably take time.

We now take a look at the background of main actors that were observed, interviewed and compared during the fieldwork:

### 5.1 Robin Hood Army (RHA)

The Robin Hood Army is the brainchild of Neel Ghose and Anand Sinha, born on August 2014 in New Delhi and inspired from Portugal's Re-Food Program. Around the same time in that year while working in Lisbon, Neel chanced upon Re-food – a local organisation that started out as a one-man project in 2011 and redistributed excess food through volunteers to the economically hard-hit regions of Lisbon (Refood, n.d.). After working with founder Hunter Halder to understand the basic working process of such a distribution model, it was decided to start something similar back in India, especially because of a greater need. RHA accepts food wasted by organisations, communities etc. and serves it to the less fortunate of all religious backgrounds; children, their families, those residing in orphanages, public hospitals, old-age homes and so on ("The Robin Hood Army," 2019, pp. 1–3).

On one night of food distribution, Neel and his friends realised what they were doing was, though noble, not quite impactful in a country like India when done merely once a week to feed 50 odd people. Thus, this organisation was born and from Delhi, the RHA spread to other cities of the country and presently functions across an impressive 158 Indian cities with 48654 volunteers (Also called as 'Robins', identifiable with their characteristic green uniforms) spread throughout. Estimated roughly, about 16.7 million people so far have been served. In a campaign dated 15 February 2015, the concept of food donation flowed over into neighbouring Pakistan and the RHA's Karachi chapter came into existence. From then onward, chapters were established in 10 more countries including Nepal, Bangladesh, Sri Lanka, Malaysia, Philippines, Indonesia, Egypt, Mexico, Australia and Canada.



Figure 2: Locations of the RHA. Source: The Robin Hood Army, 2019

In July of 2016, the organisation launched the ‘Robin Hood Academy’ also known as ‘RAHAT’ (Translation from Hindi to English: Relief) with an aim to bridge the gap between the condition of underprivileged families and their inability to educate their children, many of whom exhibiting great promise. Classes are conducted by assigned volunteers with past or present teaching experience and are based on a standardised curriculum which is aimed at driving within children a spirit of learning. Their efforts have paid off by empowering more than 6000 students with basic primary education, of whom around 1600 are now enrolled in schools across different Indian cities. The curriculum is divided into 3 levels with subjects such as mathematics, science, social sciences as well as overlooked yet crucial subjects such as value-imparting and language (The Robin Hood Army, 2019). Categorically, it introduces itself as an organisation that is: volunteer-based, zero-funds and all-religion serving.

Robin Hood Army Balance Sheet For Non-Financial Years 2014-2018			
Debit	Amount	Credit	Amount
Rent	0	Robins	14,365
Wages & Allowances	0	People Served	6,037,245
Repair & Maintenance	0	Countries	12
Power & Fuel	0	Blessings	Infinite
<b>Total</b>	<b>0</b>	<b>Total</b>	<b>1% done</b>

Figure 3: The RHA's balance sheet from 2014-2018. Source: The Robin Hood Army, 2019

The points repeat themselves in meetings and discussions and are of relevance especially in the domain of surplus food donation which creates much awe and admiration among people to come forward and offer sums of money, which they feel is the least they can do if not spend energy on volunteering. It is strictly prohibited. The significance of being all volunteer based is that hierarchy then, is not existent. Every individual belongs to the same level no matter his educational

background, finances and such. Freshly cooked food and also surplus food from restaurants, weddings and parties is served on a goodwill basis. Moreover, it is served to people irrespective of their religious affiliations (Wikipedia contributors, 2019).

It is interesting to note that with each passing year on 15 August (celebrated as Independence Day in India), the RHA aims to feed a higher number of people. Apart from the cause of tackling hunger and spreading smiles, it is a movement to create awareness on food wastage and a medium to draw in interested individuals to volunteer. For instance, from 2016 the RHA teamed up with popular Indian start-ups such as Snapdeal, Oyo, Zomato as well as musical artists to unite people to serve 516,000 of the less fortunate. The same movement on 15 August 2018 was aimed higher where 1.99 million of the less fortunate were served across 70 Indian cities.

The latest developments are only moving higher up for the Robin Hood Army: Very recently in November 2019, it entered the Harvard Business School's full-time MBA programme as a case study for students. Neel and other key members have also appeared on many TEDx talks elaborating on their efforts from how the organisation was built from the bottom to how the lack of food is not the cause of hunger (Venugopalan, 2019).

## 5.2 Zomato Feeding India (ZFI)

A contemporary colleague to the Robin Hood Army in terms of popularity in the Indian context and outreach is Zomato Feeding India (Previously just Feeding India). Feeding India was founded by then 22-year old Ankit Kawatra and co-founded by Srishti Jain in 2014; after witnessing food that could have served more than 5000 people being thrown away, Ankit was forced to ponder on bridging the gap between a quantity of food so humongous and equally great, the amount of people who go hungry every day in India. The core purpose was to repurpose food while generating a sense of change in the behaviour of people and forcing them to note that 'hunger and food wastage are two sides of the same coin'. To 'repurpose' in this scenario means to donate the food from a donor party that does not see any further purpose to the food, and regards it more as leftovers and an overall burden to do away with, to those individuals actually in need of the food, who would find the food 'purposeful'. After being taken over recently by food-app giant Zomato (Figure 3 and Appendix II) in July 2019, ZFI is now the India chapter of Zomato Feeding Foundation and is yet again a non-profit organisation that addresses and solves the issue food wastage as a means to eradicate hunger in the country. Any form of funding is expended judiciously to gain maximum effect out of the venture. Food from individuals, restaurants, corporate establishments, events are picked up by volunteers (Donning fluorescent green T-shirts) and distributed to beneficiaries who usually do not have proper access to a day's meal. Fresh food that otherwise would have gone to waste is rerouted to be served to those in need. Key beneficiaries that Zomato Feeding India believe need to be given priority are:

- **Children:** Because of being in their growing phase both mentally and physically, ZFI successfully provides nutritious meals 3 times a day to children keeps supervision on their overall health and nutritional intake. It is hoped to not only make them physically robust but also direct their efforts much better towards studies and other activities.
- **Women:** Women are more vulnerable to sickness due to starvation especially during the period of pregnancy, which demands that they receive proper nutrition. They need to be provided healthy foods for up to 1000 days post-pregnancy.
- **The Disabled:** ZFI places special emphasis on donating food to the disabled individuals and also on equipping them with some form of skill in the form of special training programs so they take measures to sustain themselves with their own living.

- **The Elderly:** Many elderly do not have a source of income anymore which makes it difficult for them to get access to proper nutritious meals, also regularly. ZFI supports these old citizens and takes care that the food they are served is healthy and at the same time digestible (Zomato Feeding India, n.d.).

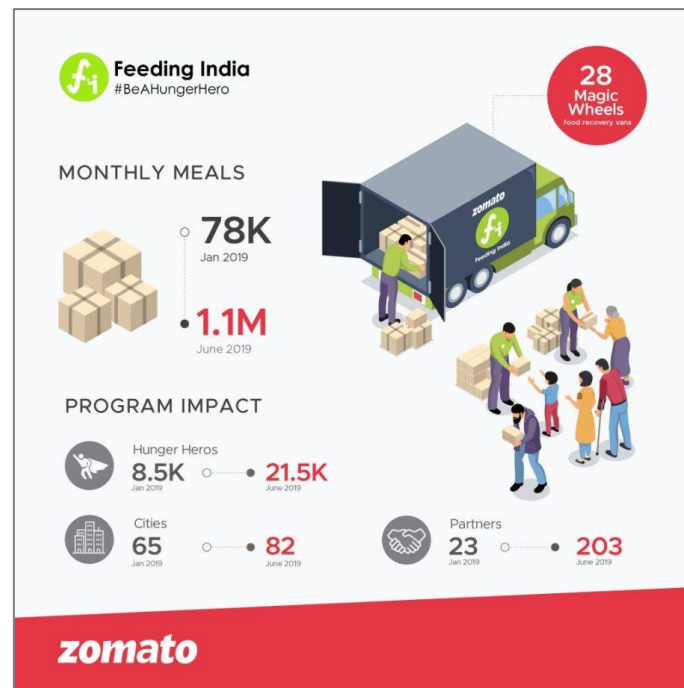


Figure 4: Impact of Zomato's takeover on Feeding India. Source: Soni, 2019

Core operations are managed by a team of 14 members (who are official ZFI employees) in Gurgaon city, close to Delhi (Zomato Feeding India, n.d.). Operations conducted are in the form of:

- **Magic Wheels:** These are vans that collecting and delivering food in large quantities, yet reliably. A standard operating procedure is followed to main food safety regulations before and during donation of surplus food respectively. The vans are equipped with boxes insulated with gel pads and temperature controlled to improve shelf-life of food, many times collected at off hours. Once corporate entities (i.e. considerably large companies) agree to donate food from their inner establishments like cafeterias, Zomato Feeding India manages everything from collection to transportation, handling, quality checks and donation. An agreement stating donors becoming free from all responsibility once ZFI collects the surplus food is signed. Currently there are 83 Magic Wheels and 170 corporate partners who have delivered around 1.1 million meals to the less privileged in September alone.
- **Happy Fridge:** The Happy Fridge is aimed at supplying food and reaching out to the mobile labour population. Donations are made willingly by people in the form of cooked food, fruits, nuts etc which is for anyone to access immediately, and in a dignified manner. There have been installed 68 Happy Fridges so far across 25 cities. According to ZFI's website, each fridge serves approximately 1,500 meals and saves around 700 kg of carbon emissions per month.
- **Hunger Heroes:** These spirited citizens are volunteers working towards initiating a change on the ground. Backgrounds of the volunteers range from college students, working professionals and retired individuals. The most important task of collecting excess food and donating it to hunger spots around the city falls under the Hunger Heroes. They are also involved in monitoring, initiating and assessing the projects of the Happy Fridge and the Magic Wheels. For instance, in the month of September, 3,19,000 meals were served by the Hunger Heroes.

- **Poshan to Paathsala** (Translation: Nutrition to School): The program aims to secure early access to nutrition for children particularly from the slum and less privileged background, by serving meals at schools. Getting a meal in return for education draws in all the more children. This acts as a strategy for parents of economically challenged homes to send in their children to a school in the vicinity so at least their nutrition is taken care of. A balanced meal comprising of vegetable, lentils, bread, milk and a nutritious cookie/bar is served to all the children, between the ages 5 – 12 years. This is good news because otherwise the children would find themselves working hard at labour sites. About 13,000 such children were served in October this year.
- **Emergency Relief:** In the event of a natural calamity, when lives are disturbed and people are deprived of the basics of food, water and shelter, Feeding India launches ad-hoc programs providing these basic amenities. All relief material is distributed by Zomato Feeding India's partner agencies or the volunteers themselves on ground. A typical relief package contains basics like rice, pulses, vitamins capable to serve a family of four. This year, about ₹9 million was spent to serve 0.9 million meals to 12,000 families in natural disaster affected areas of India.

### 5.3 Arham Yuva Seva Group (AYSG)

In November 2005, Arham Yuva Seva Group (Translation: Youth Service Group) started with one centre in Mulund, Mumbai with fifty like-minded individuals, and has since grown to more than a thousand members in 60 centres all over India, also abroad. Under the inspiration and guidance from Gurudev Namramuni Maharaj, it aims to inspire the youngster in everyone to dedicate their spare time in activities that would earn them rich dividends; moral and spiritual. The term 'Arham' denotes here an invocation to give up negativity and devote oneself toward selfless service by virtues of vigour, exuberance and self-control. Excess food donation seems to be a small part of the varied list of activities that the organisation participates in such as:

- **Animal welfare:** Volunteers reach out to animals on the streets by providing food, fodder and hydration packets to strays as well as those in shelters by means of contribution that would improve their care and state of well-being. Animals slated to be slaughtered are also rescued and rehabilitated safely to animal shelters. At present, more than twenty thousand goats have been rescued. Goats are one of the most common animals to enter slaughterhouses for eventual consumption by people.
- **Arham Aahar:** 'Aahar' is translated to nutrition. Thus, a high-quality nutritious meal is donated free of cost every Saturday to two thousand individuals across fifteen centres in Mumbai. So far, 1.6 million such meals have been served.
- **Arham Sadharmik Sahay:** The word 'Sahay' means support. AYSG provides support to certain families that may not be underprivileged but may still be struggling. Support is provided in terms of the fulfilment of their monthly grocery requirements through a kit that includes basic food ingredients such as salt, sugar, oil, pulses and grains. More than sixty thousand such kits have been donated so far to struggling families.

Arham Yuva Seva Group believes that with selfless service to mankind, a person's ways of thinking, acting and speaking transform to a state that is only possible when one is at peace. To become an official member of the organisation, an individual must devote up to eight hours a month as per his convenience. It is a wave meant to touch the lives of thousands of people on a positive note (Arham Yuva Seva Group, n.d.).

## 6. Fieldwork, Observations, and Learnings

Before reading the section, I would like to mention the denotation of specific fonts for a specific purpose: *italicised fonts represent my observations gained upon my interpretations after moving away from the field*; ***boldened and italicised fonts represent key learnings or final statements of those interpretations***; finally, the normalised font describes my observations as I happened to see the situation and/or act in it.

### 6.1 Volunteering Observations: The Robin Hood Army (RHA)

#### Initial experience on field:

With the RHA's approval, I started my fieldwork journey. Upon my preference to volunteer in Thane while filling out the registration form, I was firstly added to a WhatsApp group titled 'RHA New Volunteers' which had a display picture of a list of the POCs (Persons of Contact) of all existent locations of the RHA in Mumbai. It was a general group with a few moderators who posted messages of any notices or developments or instructions to all inexperienced volunteers.

Considering the massiveness of the cities, there were almost 15-20 locations where the RHA operated. From here, I contacted the Thane POC Robin Tanmay, requesting him for an interview which I shall talk about later in the report. A POC can be male or female, young or old without any discrimination. For instance, Tanmay and his peers coordinating the Thane chapter were all youngsters while cluster POCs were older than them; yet there was no hierarchical system, and all worked like a single unit.

There are 23 locations within RHA-Mumbai. Upon reference from Figure 3, these locations are called 'chapters.' Within each chapter, there exist smaller 'clusters' which are centres for all kinds of 'drives' or activities undertaken. The Thane chapter is part of the larger body which is RHA-Mumbai.

With the Robin Hood Army, I volunteered every Saturday and Sunday at different locations also called 'clusters' out of six that operated within the Thane chapter handled by Robin Tanmay. The drives were organised as weekly drives where food from trusted foodbanks was served. Some locations operated weekly drives on Saturdays while others on Sundays. Calls for excess food did not happen as often, so most of my learnings are based on weekly drives.

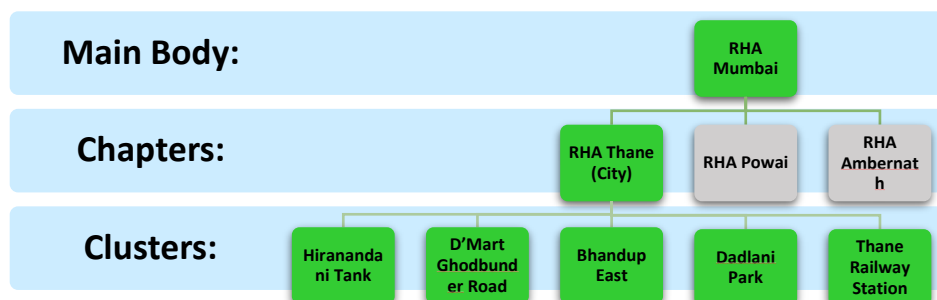


Figure 5: Organisational structure of the RHA. Grey boxes are only ancillary examples.



The locations were:

1. Hiranandani Tank
2. 2. D'Mart at Ghodbunder Road
3. 3. Hiranandani Platinum Heritage
4. 4. Bhandup East
5. 5. Dadlani Park
6. 6. Thane Railway Station

The following map illustrates the locations to provide a clearer picture:

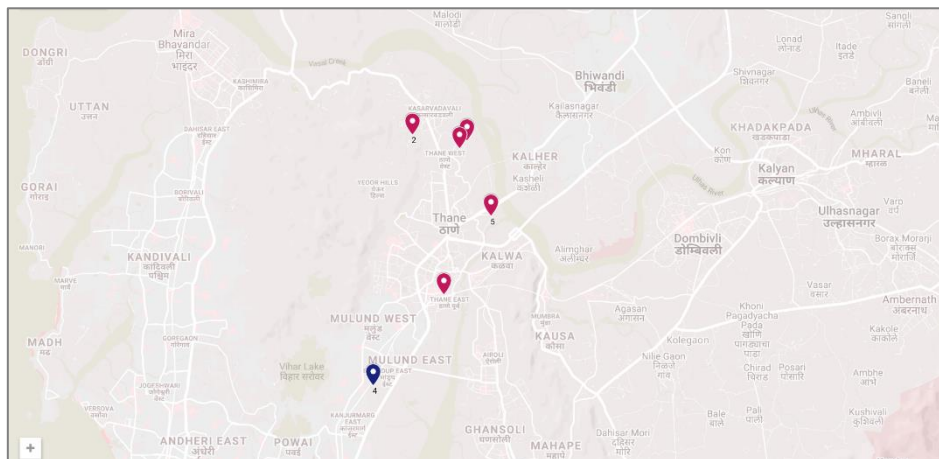


Figure 6: RHA Thane cluster locations. Blue pin falls in Mumbai and red, in Thane. Numbering in accordance to the preceding list. Made with Google My Maps.

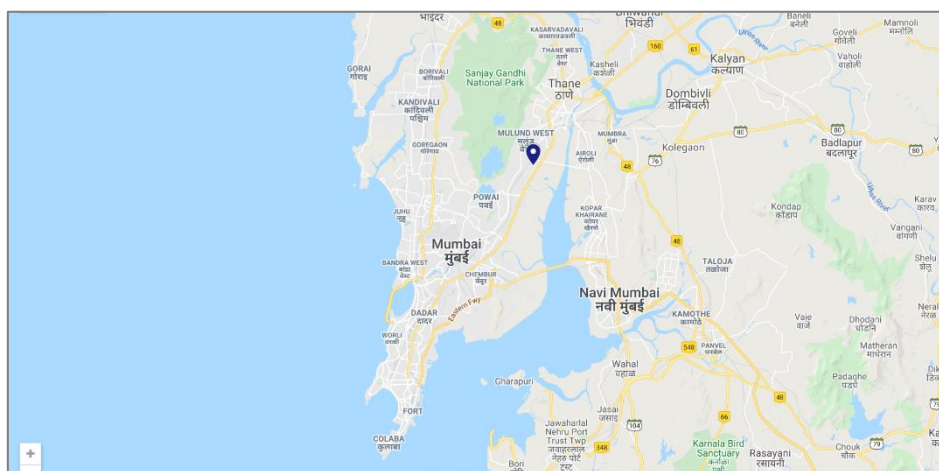


Figure 7: Broader map showing Bhandup East (Blue pin). Mumbai city starts from Mulund.

Every cluster was handled by again a POC Robin who had been volunteering at the cluster for a long time and so was experienced in connecting with the locals there. If the usual POC was away, someone else would function instead of him till he returned. Out of the six locations mentioned above, I had visited locations 1, 2, 3 and 5 but to maintain consistency and get to know a place for more than one mere volunteering episode, I used to volunteer at Hiranandani Platinum Heritage on Saturdays and at Dadlani Park on Sundays.

Interpretation of observations are in italics while concise learnings are in bold and italics, and are summarised as follows:

- *Locations of the RHA in Thane are rather concentrated around the Hiranandani Ghodbunder Road area (denoted by locations 1, 2 and 3), and many times it has been noticed that the families*

coming to receive food is also overlapping sometimes at locations 1 and 3. In contrast, the mid portion of Thane city does not have a designated food donation spot. But that is justified since almost the whole of the area is residential and it is very difficult to find families to donate in this portion. **A more even distribution of locations would be fruitful to shift the existing or form new ones after proper survey of the number of families, their children etc (for example, diametrically opposite to location 5). This would also help in responding i.e. collecting and subsequently donating the surplus food from nearby donors thereby reducing issues of traffic and food spoilage.**

- *If Figure 5 above is to be divided into two halves, the left half starting from Mulund West would comprise of Mumbai while the right, of Thane. On the right side, Kalwa, Kausa and Dombivli are found to be situated out of Thane city, yet all are collectively governed under the Thane district.*
- *In fact, mentioned above at number 4 and 7, these locations are technically part of Mulund region (which should ideally be its own chapter but does not draw a large enough volunteer participation yet) but is under the jurisdiction of the Thane chapter because many members from locations just across the Thane-Mumbai border on the Mumbai side are part of this chapter. They find the Thane side closer to them than the nearest RHA-Mumbai chapter. Since there are many such individuals, for their convenience, it was decided to begin a chapter at Bhandup East.*
- *The recipients at all the visited locations were similar in the economic and societal standing sense. Most families had a working member who engaged in menial jobs (most commonly as domestic help in case of women and small-time jobs in case of men) to get by through the day. In my observations, food donation was more a means to make their living easier so that they spend their expenses on other important concerns or save it. Some of the families' houses were makeshift, while some lived in small, solid houses and were typically congregated in the so-called 'slum' areas around.*
- *The Thane railway station drives used to be especially famous within the RHA. Mostly because it was the only 'night-time' drive and was carried out weekly by coordinators and volunteers of RHA Thane. The coordinators otherwise were not seen at other locations, with exceptions. The recipients at this location can be classified as perhaps the 'neediest'; it comprised of the old and the desolate who had no means of feeding themselves, and thus had to resort to begging for alms. There were disease-stricken individuals and the help of the RHA every Sunday was much appreciated, for many ill persons were sent to hospitals, their progress monitored, and treatments paid for. Children were forced to beg out of pressure from circumstances; such children were looked after to be sent to schools or orphanages nearby. The drive started at 8 PM in the night and commonly went on till about 12 AM or even beyond. Food was distributed to the recipients who virtually lived on the over-bridges near the station, also near ticket counters.*

## Experience 1:

My very first experience was on 29 September at 12 PM on a sunny Sunday. In the WhatsApp group was posted a 'Google docs form' that listed tick-able options of the six clusters with added information of the location, day, date, time and the POC's (Person of Contact) details. My then POC was Robin Bipasha. The first task was to find the exact location. One had to go to the end of the straight road which was blocked by a large water pipe and one had to take the last 'narrow right' right after the auto-repair shop. Upon nearing the temple, more than a hundred kids aged 3-15 years were seated inside on the floor making a noise with Robins asking them to focus on a kid reciting something which was ungraspable in that moment where I saw so many faces in that commotion for the first time. The children belonged to families that lived just around the temple, most of which earned low incomes. Finally, the food came in steel containers with the donors on a motorbike. I

remember the menu being 'pulao' (A preparation of spiced rice) with 'raita' (Yoghurt, few vegetables and spices). After the food arrived, children formed a line inside the temple while the food was placed on a pedestal and served. They received the food and went back home. After everyone present was served, those who came back were served as required. A few parents and grandparents also arrived later to take food for their family, and we obliged to serve. Most of the kids did not ask for more, only some did. There were seven Robins present that day including me. The donors, a father and his son, had also collaborated with the RHA for the first time and were exchanging numbers with Bipasha for future orders. The father had his own catering business and informed us that they would come back again when they find time. Interestingly, a local woman named Dhanraj was also an 'unofficial' Robin; her role every Sunday was crucial in going door-to-door to call inform the children's families, thus helping in prior coordination. The drive was complete, and food was all finished.

Interpretation of observations are in italics while concise learnings are in bold and italics, and are summarised as follows:

- *Locations in India are difficult to find and usually guided by glaring landmarks and directions. You always need to call the POC once you reach the general location, to reach the exact one. Dadlani Park was a location that would familiarise you with the need to reformation and upliftment of all. It was dusty and not the cleanest. I would not call it appalling as I have seen much, much worse. But so much needed to be improved, from the surrounding environs to people's tendencies for instance, to throw trash into water bodies. The road leading to the temple and beyond was 'kachcha' or not well built. If you dropped a liquid somewhere, it would just be pooled there for until evaporation. Houses could also be termed kachcha or makeshift though some were built fairly well, painted and clean on the outside. Lanes between houses were narrow, like in a typical Mumbai slum. Indeed, this was a slum. Most families looked like they had a challenge to meet their daily food needs. But in all cases, having to not worry about their kids' food for even a day would be beneficial to the family's condition. Some parents never their sent their children to the temple on Sundays, especially those living in brick houses. They preferred to feed themselves on their own accord, rather than relying on someone else which could also make their child ill. But most parents obliged to send their kids for the weekly meal. **It provided me with a picture of how the recipients in these areas lived; poorly built roads, makeshift tin or smaller houses, poor sanitary conditions and no access to healthcare.***
- *Bipasha was involved as a teacher in other NGOs in addition to have joined the RHA recently. The kids at Dadlani used to refer to her as 'teacher' which makes me think she was a part of this organisation for a month or so. She had taken over the location from Robin Merrell who used to coordinate the Sunday drive at Dadlani since a long time. Bipasha was responsible for unofficially asking donations for her other NGOs which violated the RHAs non-monetary policy. She was removed from the group sometime in the end of October. **Swift action against violation of RHA's non-monetary policy was highlighted.***
- *Of the seven Robins that day, a slim, energetic, almost 35-40 years-old Mr. Shah was especially active in voicing his opinion. His unrelated exaggerations made me think of not returning to the spot again, but I had to adjust with all kinds of people to fulfil this project and in life in general. **The RHA consisted of volunteers of all kinds and teaches one to adjust and work as a team towards the common cause of hunger eradication.** But he gave me an important insight when he explained how he volunteers to educate children, but the families decline to send their children to school. How must you then have them learn values that would for instance, guide you to not waste any food on your plate? **Children are the future of the country, which is why education needs to be supplemented with a necessity like food.** Only then shall parents relent with the hope that at least their child gets to eat, while they can somehow manage.*

- *The kids were especially mischievous that day, making it difficult for anyone to calm them down. My idea is they were eagerly waiting for the food to arrive and seeing so many new faces, could not hold their excitement. It is common for Robins to engage kids' attention to reciting their learnings from school such as numbers, days of the week, months, poems, stories etc. It keeps them gripped to that one kid, silences the noise and keeps them patient till food arrives. Many parents send their older kids not just to receive food but to look after their younger siblings. **If kids are involved, there must be at least one volunteer with experience in a school or with teaching. Kids like to be engaged in something during which the situation is less chaotic.***

## Experience 2:

The following week, on Saturday 5 October, I proceeded for my second drive scheduled at 1:00 PM to Hiranandani Tank. I reached but could not get to the exact location but was late. I decided to go to the evening Platinum Heritage drive at 4:30 PM. The location was called so because it was just outside the premises of the Hiranandani Platinum Heritage building. Beside the building was yet again a kachcha (poorly built) road that led way to shanties and makeshift slums. There was a provision for shops on the ground floor of the building, some of which were unoccupied or closed. We were a total of six Robins, and some had brought along their relatives. Sona was accompanied by her husband Dilip each week. Around 90-95 children that day sat outside the closed shops in a line along the pavement, guided by me and the other Robins. Food was usually bought in a car. The foodbank was the usual Rodas Foodbank run by Ms. Bhavna who used to prepare the food in steel containers. On the occasion of a Robin's birthday, he had brought everyone chocolates. There was a mad rush for the chocolates, with many children asking for more when the quantity was fixed to one per child. The link here at Platinum Heritage between us and the recipients was Prashant, a young local who lived in the same area as the other children. He helped us out with setting up the kids in line, bringing additional items such as spoons from his home nearby and distributing food out of will. Children were asked to finish their plates first and then ask for another round. At the end, if everyone was served and yet food was still left, any askers would get another food serving to take home for their family. This time as well, at the end of the drive, food was over.

Interpretation of observations are in italics while concise learnings are in bold and italics, and are summarised as follows:

- ***It would be wiser to provide a map, even better, a 'pin' location of the cluster to help any newcomers or aspirants.** Although their standpoint of not using either is also understandable since one is in need of assistance to find the location only once or twice, after which it becomes a matter of habit. The Platinum Heritage cluster location was a glaring reminder of the wide gap between the rich and the poor. **Paper and plastic waste was generated with each drive, not carefully considered at this particular location.***
- *Many volunteers come with relatives, their own children, or parents. **Many people want to join, but do not take the initiative. Introducing children to these NGOs at an early age can drive them to take up social issues in the future.***
- *Kids at the cluster were on average older than the ones at Dadlani. They seemed a little shrewder because of a tendency to ask more even when the plate was full. **Kids tend to beg for food for the families. Can we successfully feed their families too?** It is a good thing for the RHA when food gets over; indeed, when all have been served, those asking for more get more. **The idea is to serve little by little while asking for the plate to be finished only when more will be served. If the child is genuinely hungry, he will finish everything and come back for more; food needs to be kept for such kids.***

- *Introducing goodies such as chocolates takes away concentration of kids from food on their plates. It is best when such treats are introduced after everyone has eaten and is about to go home.*
- *Prashant was an excellent young lad of about 11-15 years. Bright, modest, calm and well-versed in the language the other kids would understand. I found that he used to help us serve and only when food was left, used to eat. When requested to leave and join his friends, he would maintain that he wanted to keep serving. **It is good to have a point of contact who is local to the community. He informs everyone and prepares the scene in the event of surplus food, brings the community together and even suggests solutions if food gets left (“I know of an area so and so where there are people who do not get to eat...” or “Keep the food with me. I know more people who did not come here at the (surplus) drive today, but I can distribute it to them”.** It is vital to have such an enthusiastic person as part of the group.*
- *Having a headcount is primarily as information for social media and the other members of the organisation. It is at most a rounded figure as kids keep moving and pouring in with the passage of time. Depending on availability of space and time, it is either applied or is not. But I observed a downside: as soon as the plate gets filled, many children wish to leave but cannot because they need to wait for the count. Instead, it causes commotion, confusion and petty quarrel. **In case of serving children, food could be served with them in a line while simultaneously counting the number. In such a case, it is not necessary to hold them back.** Also, holding them back in an outdoor setting leaves food on the pavement and in front of the shops which can be completely avoided by adopting a similar method to the one followed at Dadlani. **It is easier to clean mess in indoor settings. In outdoor settings, volunteers tend to have a laid-back attitude to the waste created.***

### Experience 3:

After Bipasha was removed from Dadlani Park, Merrell, under whom the cluster used to be organised, took over as the POC. I worked with her only once on 1 PM Sunday drive where in total we were four Robins and Dhanraj, the local woman. The food was served as an exception, outside the temple in a by-lane beyond. The menu was chicken biryani, and the kids seemed excited. Merrell had cooked it herself and bought in two large steel containers. The quantity was such that despite serving multiple portions to those asking, less than a half of one container remained, and Dhanraj suggested us to distribute it to families and nomads that lived near her own house. Dhanraj lived a short walk from the temple on the other side of the road. On the way, we came across of a group of beggars and asked if some food could be donated to them. We fed them a decent helping as they were four individuals and looked like they had not gotten to eat for a long time. With a little more left, we made our way to Dhanraj’s neighbours who did not wish to receive any food. Finally, we proceeded to her home which on the front had a garage run by her husband and elder son. They were kind to offer us food and water, the former us denying out of courtesy. She assured to either distribute the food to the nomads if they could be found or finish it amongst her family.

Interpretation of observations are in italics while concise learnings are in bold and italics, and are summarised as follows:

- *Merrell was socially and politically active woman and had networks with all kinds of people and institutions. **Having volunteers with large numbers of influential contacts helps in quickening legal procedures and avoiding its hassles.***
- *After a new Robin completes three or more drives, he informs his POC who then asks Merrell to shift him on WhatsApp from the ‘RHA New Volunteers’ to the ‘RHA Thane’ main group. Excess food calls are posted here and not on the group for new entrants. In fact, there exists a third*

WhatsApp group called 'RHA Reserved' which is for Robins who want to get involved only for drives and not organisational discussions. It is a way to distribute the incoming rush and keep everyone informed, though according to their aims and workstyles. **This is a unique method of managing a crowd seen only with the RHA in my experience. It keeps a check on who is active and who is not.**

- **Chicken, egg or any sort of meat is a luxury for many families, and the rush to receive food on those days is especially high.** On the flipside, such an instance rarely arrives as the people who are left with excess meat dishes is not common because they are indeed sought after and get over fast. Even when they do not get over, someone offers to take it back; either a staff or a guest or the host. This is because of people's liking and preference of the taste of such dishes. **Liking plays a major role in total donation time (among other factors such as quantity, number of the recipients etc.); if the food is familiar and well-liked, donations are easily accomplished but if the food item is not well-liked by the receivers, one needs to spend more time on field to donate the food. Meat dishes are highly sought after. Salads, for instance, not so much.**
- **On that particular day, the chicken-rice menu was served outside to keep in accordance with the religious sentiments of the locals. In the popular Indian faith of Hinduism, any meat products are barred from the interiors and immediate vicinity of religious sites. If an organization is serving an area where the locals belong to a majority faith, their sentiments and limitations must be considered, as this is a sensitive and serious issue among the more unprivileged.**
- **When we told the four beggars, we did not have anything to serve the food in, they tried to bring us anything they could from the vicinity; plastic bags, dirty papers. I wondered why we could not serve a different set of people each time an excess food call came in, but usually go to the clusters. There may be someone in a need more dire to eat. For this reason, knowing the location like the back of the hand would be required, and is possible if one or a small group of volunteers become experts of their area.**
- **Dhanraj was to the Dadlani Park cluster what Prashant was to the one at Platinum Heritage; only more mature, informed and connected with not just children, but also their elders. A kind, well-mannered woman, despite living in a family of six (to my knowledge) including her and her four children, she said to all of us "Please eat some dal-chawal (dal and rice), then go. You have come to our home." We politely declined and had a glass of cold water. But whatever these little families have, they offer it to you without worrying about the future.**

#### Experience 4:

I visited the Robin Hood Army Academy at the D'Mart Ghodbunder Road cluster in the month of November and the drive took place at 4 PM. Fortunately, I was provided with a pin location this time but the area being secluded, the internet went off. I called up the POC Robin Hema who guided me well. The location was away from the main, straight Ghodbunder Road and even then, it was still further tucked away in a corner. This was a large bungalow with two floors, each having multiple clean rooms. It looked empty and newly done up. We operated on the lower floor. I was informed later that the bungalow belonged to the popular builders active in the Ghodbunder area who noticed children being taught outside the bungalow. Out of goodwill, he offered the place to teach the kids. Around 20 kids aged 3-13 sat on the floor along the perimeter of the room. The atmosphere seemed calm and breezy; the kids were quiet, cheerful. Upon the request of one child to put on the kids' favourite music, everyone including elders closed their eyes and enjoyed the song and the moment; a form of relaxation in an already relaxed environment. Robin Akanksha was responsible for teaching kids and on that day, they were taught simple science experiments. Everyone gathered round her inquisitively while she showed differences between acids and bases

and gravitation through demonstrations using commonly available items. Those who were too small to understand excitedly watched the experiments. There were seven Robins and three others; the latter were impressed by the organisation's work and wished to donate blankets and chocolates to children. After the class, snacks were served to children and eaten without a fuss. While going home, they were distributed a blanket each and some chocolates.

Interpretation of observations are in italics while concise learnings are in bold and italics, and are summarised as follows:

- *I would personally appreciate to go back to this serene experience. Hema and her husband Ashok, and all other Robins treated the children like their own and always listened to them with intent. Children could make all the mistakes they wanted to, for they would be pardoned. The location secluded from the hustle and bustle of Thane, and the neatness of the surroundings seemed to have made an impact on everyone. Also, the role of soothing music before class started was helpful in calming the children. No one complained or fought, as was usual in other locations. **Children are calmed down by a quiet atmosphere and soothing music. Once calmed down, they are more receptive to receiving instructions, or even food. But is it possible to divide a large population of the recipients (in particular, children) into smaller groups and serve them separately so that more control is gained, and no traffic or surroundings are disturbed?***
- *Here, on the one hand, children were being groomed for brighter futures, and on the other they were being fed each week. **Is incentivisation of food possible in a manner even for adults? Perhaps with small-time local jobs which will help the less-privileged recipients to become independent. It is important to get familiar with the crowd you serve; and to lend an ear to their needs and struggles.***

### Further Experiences:

Interpretations (in italics) and learnings (in bold and italics) of later episodes are summarised as follows:

- *At the two Robin Hood Army clusters I volunteered at every Saturday and Sunday, sometimes the menu had more flowing items like 'chutneys' or other runny accompaniments that were not appropriate for mobility, especially in the hands of small children. Many a time, a lot of the item would be dropped on the pavement. **Liquid accompaniments are okay when paired and mixed with a dense food item like rice; then it gets absorbed into the denser phase. It leads to difficult handling, more waste and cleaning becomes an issue because of the presence of oils etc. and the place begins to smell foul.** Some reasons are when very young children (about 3-6 years of age) come to receive food, moreover, many children bring flat plates with low pocket sizes to fill in the liquids. **This could be countered by ensuring that a small child is accompanied by an older friend, parent or sibling. Secondly, they could either be provided deep bowls or requested to get one (providing the bowls is better where they could be asked to carry it every time the RHA comes to them). Food banks should also take care to decide if runny items must be prepared or not for small children, keeping in mind whether they can carry the food back home or not. The case of surplus drives is unavoidable, but for regular weekly drives, attention must be paid to these factors if wastage is to be avoided.***

## 6.2 Observations at Arham Yuva Seva Group

While volunteering each weekend, I got a message from Mr. Dipesh Soni on behalf of Arham Yuva Seva Group, whom I had written to asking to know more about their measures to donate wasted food. This was very close to 7 October on a Monday when I was called at 11:30 AM to the Jain 'Upashraya' at Mulund, Mumbai. An Upashraya is a place or kind of monastery where wandering monks stay for a few days with basic amenities served to them for no charge, before they move onward to a new place. At every place they go, they perform their respective practices of faith.

I reached the location a little before 11:30 AM where I was greeted by Mr. Soni and explained the functions of the organisation and the task for the day. We would be doing 'Seva' or service to people in the form of packing lunches for them. This was a sort of organised volunteering; anyone who wished to avail of the food served by AYSG had to sign up and be added to a list. They would get a 'dabba' or steel tiffin/container with a unique number that could be cross-checked in the list. Those missing their food frequently would be reminded by contacting. Each day, a new set of volunteers took over the station to serve, such that one volunteer had to attend only an hour of service in the whole week, and if willing, he could always offer more. Mr. Soni had his responsibility on Mondays, and he was my only contact in the organisation, I joined him on Mondays. Food was prepared the monastery kitchen, brought and laid out nearby (inside the monastery) in large vessels on a table, out of which volunteers served food to incoming customers. The stipulated time of service was 11:30 AM-12:30 PM. I took charge of packing the final tiffin, Mr. Soni oversaw the checklist, one for rice and vegetable, one for bread and a general coordinator; thus, including myself were about six volunteers in total. In my observation, I noticed the kind of customers that came. Most were elderly who lived by themselves or could not cook. A few young men came as helpers to pick up food for the elderly. Many daily-wage earners who did not have arrangements for a decent lunch too made their way, as did female house helps. The customers came from all faiths and backgrounds. All volunteers (me being the exception) were dressed in white. The food was prepared in a clean manner and was a healthy combination of bread, rice and vegetable. It was prepared keeping in mind the requirements of Jain traditions i.e. it contained no onion or garlic. Each item was packed in separate steel compartments, stacked one on top of another and fastened as a tiffin. Behind the serving station was a large hall inside which monks had food served to them simultaneously. Mr. Soni explained that they eat very less amounts and are used to going on long periods of fasting on a frequent basis. The food served that day was before that would go on a fast of more than a week at a stretch.

Interpretation of observations are in italics while concise learnings are in bold and italics, and are summarised as follows:

- *For the sole purpose of information, may it be mentioned that the Jain faith, or Jainism is one of the oldest in India, and is separate from Hinduism, though many traditions do coincide. The practices followed today have been inherited from the faith's founder Mahavira, who was averse to killing even the minutest of living beings; hence the avoidance of onion and garlic and other underground vegetables so as to not kill beings that flourish on them.*
- ***I appreciated the idea of providing a sturdy tiffin which can be carried easily, is durable and does not spill much. This can be adopted by the other organisations as well. Anyway, most non-profits like the Robin Hood Army and Feeding India invest in buying large containers to contain surplus food. They could also look at steel tiffin boxes; or a container with multiple spoons. This is only applicable to regular hunger spots and one container can be distributed for each family to take away the food properly. Though the capital required is high, it is a one-time investment and will be afforded at a cheaper rate when purchased in bulk.***
- ***Another plus-point was that of keeping a list of customers served. For larger areas this is indeed unfeasible, but there are many areas in Thane where small groups of recipients cluster.***



*Basic details could be jotted down which could be referenced for the future; for instance, 'Family X has a young kid who needs to go to school. Find an appropriate school'. Or it could be to track their whereabouts and usual spots so that at the time surplus food is received, one does not end up at the local spot only to find there is nobody, that everyone is away for a few hours at another spot. Basic jottings of pattern observations at hunger spots instead of a checklist are also an option to optimise the food donation ideal of non-profits. They can be done by one designated volunteer and can serve as learnings and points of consideration for the organisation.*

- *The concept of designating a particular day for a group of volunteers is also worthy of mention. It should not be seen as a form of establishing control but only to ensure the availability of someone or some group to collect food each day. In fact, on any given day, as per convenience, one particular group may be active in the afternoon while another, late in the night. If it turns out to be lopsided, in that the night group finds itself working more than the day group, an exchange in timings or a shift of some members here and there could be considered. All of this should be according to the wish of a member, for after all, it is an act of volunteering. But often, one relies on his peers in the organisation and tends to sit back and forget his role. In that case, he may be assigned a specific day, and to decrease his apprehensions, be put in a small group so work gets carried out by a team.*
- *AYSG's strategy gave me many fruitful ideas that can be applied to other food-waste NGOs. This was a smaller, yet thoughtfully organised group system. I did not spend much time here as I had no more observations to make, and because I did not wish to do the packing work for long. I asked Mr. Soni to contact me in the event of a surplus food call, to which I was told such calls are rare, even more so because of the added dietary eliminations.*

### 6.3 Observations at Zomato Feeding India

I had applied to Zomato Feeding India before landing in India on 22 September. After many more follow-up E-mails and phone calls, the process kept delaying. Finally, on 23 October, my application was approved, and I was added to the ZFI Thane WhatsApp group. I got to know with time that at least one administrator of the many, in the WhatsApp group was one of the fourteen full-time employees of ZFI. There were 105 members out of which roughly twenty could be considered active, including myself. The city head for the Thane chapter of ZFI was Ms. Radhika.

#### Experience 1:

The day after I was added to the group i.e. on 24 October, was the inauguration of the first Happy Fridge in Thane city, which is one of the non-profit initiatives taken up by ZFI. In actual, there was also a second one to be installed in another location (at Kalwa) but got cancelled at the last moment. The location of the fridge was carefully selected to be an extremely busy Radhakishan Lalchand Petrol Pump (or gas station) in an equally bustling locality called 'Teen Petrol Pump', named so after the 'three petrol pumps' that exist there; one can imagine the flow of crowd through the area. The pump was surrounded by local shops, small-scale restaurants, and residential buildings on all sides. In the front was the main road, not the kind observed on highways but smaller, that carried people to-and-fro around Thane. The railway station of Thane was a short distance by vehicle, which was another factor adding the fact that people from varied backgrounds on their way home could on their way, pick up food to eat.

Upon reaching the location at 4:30 PM, I noticed the fridge placed at the entrance in the centre of the petrol pump. There was a total of about 12-15 volunteers; all of them were working

professionals and I found myself to be the only student volunteer. With a joyous atmosphere around, the fridge was inaugurated by the station owner's son and younger brother. Towards the end, was filled with fruit and some sweets as marks of inauguration. All the while, vehicles came in to fill their tanks and many were curious to know more on the concept of a public fridge. On the previous day, restaurants in the vicinity were informed by Ms. Radhika and some other volunteers about the installation of the fridge the next day. That, in case they had food left with them, it could be donated in the fridge.

The aftermath of the initiative was that no sooner was the fridge installed than messages on WhatsApp and other social media started to spread like wildfire. Volunteers themselves spread the word to their contacts, leading to many more requests pouring in from all kinds of people young and old, to install a fridge at their location. Everyone appreciated the concept, and it was also covered in corporate magazines. In fact, the incident brought Zomato Feeding India as an organisation working to reduce food wastage, into the focus of the masses which led to many more volunteers joining. But I observed that the step-by-step instructions on packaging and handling food before placing in the fridge also needed to be in a native language besides English, which was illustrated by default. I took up the task and made a simple flowchart translating the instructions to those in Hindi and Marathi, the latter being the regional language of Maharashtra state. I duly stated the importance of having the print in colour for swift noticeability and kept the language simple and concise.

Interpretation of observations are in italics while concise learnings are in bold and italics, and are summarised as follows:

- *Possibly Zomato Feeding India gets so many requests which takes time to process is why I took so long to join. Moreover, processing is done on a voluntary basis adding to more time. The non-profit is not as popular in other regions as it is in the Northern parts of India like Delhi, Gurgaon from where it actually began. For the first time was I given a taste of the delays experienced when typically interacting with NGOs. **Very slow process of approval of an application which may deter many aspirants; this is the case when it is mentioned on their website that one's application gets approved within two weeks. I observed an easier and quicker method of joining such organisations was to join a friend or a relative a few times, who would then get you added to the local chapter's WhatsApp group.***
- *Vehicles entering the petrol pump never stopped, and as far as I know, never do as long as the pump is open. This was an apt location for the fridge. On the one hand, the residential areas could contribute to putting food while officegoers, single or struggling professionals and others could take with them a meal for the day. One can imagine if the fridge was in a gas station on a secluded highway, the incoming food donation and its outgoing would be scarce, and the venture would be fruitless. **The location was of prime importance and had the correct mix of residential buildings, busy office-going and other traffic, restaurants, even some street-dwellers. But it would have been better if there had been advertising catching the eye of the ongoing traffic. Moreover, the fridge that was installed in the interior of the petrol station should have been more visible to public. This would attract a lot more customers and donors and even help spread the message further.***
- *During a function, when me and a few other volunteers met the petrol pump owner Mr. Lalchand, he explained to us the challenges he and his staff faced. Mr. Lalchand's family had been in the petrol pump business since generations, which lent them and immense web of networks and a lot of management experience of the pump and their staff. A man in his fifties, he*

also managed some other ventures besides the pump and wanted to do his bit for the unprivileged, a feeling inspired in him by his teenage son. He said that the incoming of food in the fridge was not a problem; the real issue lay in its proper donation. What he meant was that the fridge would get full very fast and his staff would, every night, distribute it to those in need they had identified and informed. Over time, the recipients came to the spot on their own. There would be situations when food would still be left, and he would instruct his staff to take it back with them. His staff, who were like-minded as him, were trustworthy and key players in emptying the fridge each day without tiring. **Installing a public fridge, no doubt, brings with it a feeling of fulfilment and selfless service toward humanity. But, to achieve the rosy outer looks and the warmth generated thereupon, which is all that is seen by the masses, demands constant monitoring, teamwork and thorough planning.**

- The owner also elaborated on the unfortunately still-prevalent system of status (not to be confused with caste; that is not a factor for deterrence here) and perception of a certain section of society who consider themselves to be higher; the ones who were very unprivileged, if seen taking food from the fridge themselves, would deter those slightly more privileged and above, to pick food because of a disgust and kind of superiority feeling. For instance, if an 'auto-wala' (Rickshaw driver) gets to know that the fridge is being operated also by street dwellers, he will refuse pick or donate from this fridge again. This type of thinking is less common among middle-income families and higher, but present in the low-income ones. There are exceptions of course as the cause is such that creates in an individual the feeling of sharing beyond societal norms, which is endearing to see. Mr. Lalchand's staff was instructed to strictly handle all donations and pick-ups with their own hands, irrespective of status. **I think the idea of meting out a common treatment is a good solution to the issue of status. It presents an added advantage to perform a quick check on the condition of the food, its packaging, and make arrangements in the contents of the fridge to make space as required.**
- Many locals were unaware of a community fridge concept, and expectedly so. **An explanation of the community fridge concept should also be advertised and be visible to the passing population.** We were told by the owner about cases of presence of unusual items in the fridge like steaming hot food or bread. **People lack the knowledge behind the correct items to put in a fridge, and that most of them who operate the fridge will not be your predominantly English-speaking, suave, office-going crowd.** Rather, it would draw the common section of society that is quick to understand regional scripts of writing than English. **In my opinion, the instructions should have been provided so where they could be placed in an area of maximum visibility that informs maximum vehicle passengers and even passers-by who may decide to donate to the fridge the next time (such as just outside the petrol pump or where vehicles enter to fill their tanks; the latter is even more applicable because there is a waiting time involved to fill gas, on account of the rush). In this case, the instructions were evident to the donor just before donation, which I think is too late to rectify. Moreover, a distinct bi-/tri-colour scheme of background, text and text box will better help in capturing attention. This of course is basic and can be improved.**
- So many people requested for a Happy Fridge installation near them. But it cannot work out unless one is prepared to dedicate a large chunk of his time in monitoring the happenings, which most people were either not aware of or did not agree with. **Multiple hands, multiple networks and ideas is essential as the problem (here, food) should be divided into smaller parts. Besides, there are legal permissions one needs to acquire which requires a certain degree of experience**

*in dealing with governmental matters and its officials. The petrol pump owner was swift in getting the necessary permissions, while other aspirants for the fridge were denied. It is rare to find people who can look after the fridge consistently well. It is also worth noting that such community fridges, more than their charm factor, are more about maintenance and a steady donor-consumer base.*

- *There is a lot of excitement initially at the news of a public fridge being installed in the locality, but it is to be anticipated that there is a high probability of donations or pick-ups to reduce. Lack of awareness to a foreign concept may lead to initial excitement but an overall aversion in the long run. The activities should be carefully monitored with joint communication between volunteers and the person(s) responsible for maintaining the fridge. Initially, there are many donations by enthusiastic people and visits to the fridge. With time, all of them reduce a little. What can be done? Social media handles can be used to remind people of the initiative and can be circulated to as many as is possible. Similarly, prospective donors can be directed to the fridge to directly donate their excess foods there, provided they find it convenient. If not, the volunteers can distribute a portion of the food on the field while the remaining can be placed in the Happy fridge.*

## Experience 2:

On 1 November, an excess food donation request for about ten people was relayed to all volunteers by WhatsApp. The time was around 4:45 PM on a Friday, meaning most of the volunteers were at work. Me, Mohseen and Mr. Mohan volunteered to go pick up the call. Ms. Radhika, who shared the message told us to assemble under the only hunger spot used by ZFI yet: the area under the flyover at Cadbury (the chocolate brand) junction, in Thane. We were told that the donors would also be present to give us the food. The three of us reached the spot, met the donors and began checking the food. First impressions were that food was hot, and not spoilt in any way. It was an elaborate Indian fare of bread, two kinds of vegetable gravies, lentils, pickle, crispy accompaniment and buttermilk; such a quantity was appropriate for much more than ten people, for rather 20-30 individuals. Also, the packaging was inconvenient according to the situation; some dishes were present in plastic containers while others were merely wrapped in plastic. There were no spoons or ladles to scoop either the gravies or pickle, and no glass for buttermilk. In fact, they did not even have plates, and we had to make a rush to find paper plates, which we later found. Using what we had, we used the plates for every purpose presented before us; to serve the food in, to scoop the gravies and to pour in the buttermilk. There was still much food left and the recipients did not have utensils of their own to keep the food in. We scoured around the place more and met some constructions workers on the other side of the flyover to whom we distributed the rest of the food one person after another. Mr. Mohan suggested we serve them the food in plates, but I relented. The workers would have access to their own plates, so it was not needed. Moreover, judging by the number of workers and the quantity of food, I was certain it would be divided by them at dinner, amongst themselves. This completed the drive, which acted as a great learning experience.

Interpretation of observations are in italics while concise learnings are in bold and italics, and are summarised as follows:

- *Excess food waste was on the verge of being discarded as waste, on this particular occasion. In the event when even donated food, which is a kind of 'waste', is further wasted due to various reasons, what is the possibility of making the most out of it? I suggest a simple way as an absolute last resort; the remaining food can be distributed to housing societies nearby- for composting. The practice is being resorted to widely by societies for their own internal waste*

*generated, and almost all of them have it. So, the food could be given to them. Or it can be given to companies that specialise in converting food waste to energy. These steps are in accordance with Evans' (2014) theory, where 'excess' in one form is deemed useful to another party for a specific purpose.*

- *Ms. Radhika was clearly informed by the donors that they had containers, but what we saw on ground was loose plastic wrap and a solitary plastic container. **Being permitted to give her my suggestions, I wrote to Ms. Radhika that establishing some ground rules was of utmost priority for a relatively new Zomato Feeding India's Thane chapter. I wrote her to request the donors for pictures of the food already in containers with a visible view of the container size; this would give added information to words relayed solely over call. The pictures could be shared on WhatsApp along with other necessary details. The donor should take necessary measures to pack the food in proper steel or hard-grade plastic containers and at least bring large serving spoons and ladles needed, for he is running catering business after all. In cases where containers are too large or even not present, ZFI could keep a certain amount of quality containers with themselves; these could be distributed to be kept amongst some volunteers. The people at this spot had barely a shelter, let alone utensils. All us volunteers could pay a contribution to buy 'leaf plates', which are very common in India. They are cheap, so large amounts can be brought for a small price, have a long shelf-life (because they are dried and not fresh leaves) and totally sustainable. Talking about sustainability, I found the affair of eating in paper plates (or even leaf plates) a messy affair as the plates are strewn around after eating. I suggested for one person coming to the drive to bring with him whatever trash bag he had to put any kind of trash generated during the drive, which can be tied up and disposed. It is also our responsibility as volunteers to leave behind a clean spot, to the extent that we can.***
- *ZFI Thane needs to establish more hunger spots in the city. **For this, a sort of local informant is needed (Read: Prashant and Dhanraj) who can not only inform if there are any recipients present in the area, but also connect them with the volunteers in the event of an excess food call. This requires exploring the city more to locate potential areas and contact the locals living there to glean more information about its inhabitants, their backgrounds, problems of food availability etc. This way, we can serve a wider number of individuals.***

### Further Experiences:

On subsequent regular food donation drives, either sponsored or not by volunteers themselves, everyone was careful to consider neat packaging to aid in convenience and for hygiene purposes. Even plates were arranged for by the volunteer bringing the food. At the time of writing this report, on Saturday 22 December, four volunteers led by Ms. Radhika: Me, Mohseen, Mr. Mohan and Mihir, went about a planned food donation which was apart from the usual location under the flyover at Cadbury junction. She was accompanied by her husband and had brought along her car, while Mohseen by his four-year old daughter rode a moped. Mr. Mohan and Ms. Radhika had on the previous day, placed orders for 'thepla', a spiced bread eaten with lemon or sweet lime pickle, within their respective known caterers. The former had ordered for 60 while the latter for 40, making the total to a hundred theplas. The food was distributed as we made our way to the Thane railway station area and was finished by the end.

Interpretation of observations are in italics while concise learnings are in bold and italics, and are summarised as follows:

- *I had previously suggested that more areas should be explored and could be done by taking our vehicles around the city. In this case, this was combined with food donation and many insights on where a hunger spot could be established, were obtained. These specific areas could also act as back-up areas to serve food at the time when the excess food quantity is large, and food is left even after donation. I noted that having a two-wheeler was much more convenient to get the job done instead of a car. The roads near and towards the railway station are perennially crowded and narrow, and a bike or moped carrying a couple of volunteers could access the areas with ease.*

## 6.4 Interview Findings

The following findings are based on three interviews carried out for each principal actor, the questionnaire as well as the interviews themselves having been described in the Appendix<sup>1</sup>. Hence, any further references to the questions or answers thereof must be referenced from the Appendix.

My request to volunteers for interviews started about a week after I arrived (on 22 September). I started with the Robin Hood Army and asked Tanmay. He was the main contact for the RHA Thane chapter, and so was busy most of the time. After a week or two-long delay, he connected me to his peer Yadu who was another veteran volunteer; no progress. At the same time parallelly, I was looking to connect with one of the RHA's weekly foodbanks that prepared food for the regular weekend food drives. For this, I asked Robin Mohit who was my counterpart from the Hiranandani Platinum Heritage location, to request his neighbour Ms. Bhavna to give me some time. Ms. Bhavna was the supplier each Saturday for this particular cluster, and her establishment was commonly called 'Rodas Foodbank'; Rodas being a restaurant in the area. I got in touch with another foodbank owner Ms. Vidhya Sharma who supplied to the (relatively) nearby Hiranandani Tank cluster. She agreed to answer my questions in writing to which I agreed. The persons from the foodbanks have still not contacted me. So, I informed Tanmay about my inability to find someone for the interview, to which he connected me to Robin Ajinkya, who agreed to answer the questions yet again, over text.

The interpretations (in italics) and learnings (in bold and italics) from Ajinkya's interview on behalf of the Robin Hood Army are summarised as follows:

- *In my interview with Ajinkya from the Robin Hood Army, in relation to Q2 (About the history and present strength of the RHA and its Thane chapter) one instantly notices the disparity between the number of total and active volunteers. People have varied reasons to join an organisation; and the organisation being voluntary, such a disparity is expected and not much can be done about it. Most such members, having not fulfilled or attended a drive in three months are transferred to the 'Reserved Group' on WhatsApp. **The strength of an organisation may be large, but regular, active volunteers are less, and most members join for their personal gains.***
- *Upon a little research, I found that Holachef is quite 18 kilometres from Thane and is based in Mumbai (specifically Powai). It would be quite a feat to deliver large quantities of food over the distance, each weekend after another. This could have prompted the RHA to find an organisation closer to them (i.e. hotel Byke) for the benefit of time and effort. There is a specific Powai chapter under the RHA-Mumbai umbrella, and some others near the region that would be conducive for Holachef to deliver to. **Finding regular wishful sponsors may cause hassles of food spoilage, leakage and spilling, traffic, delays in times and so on. It is best if a sponsor is found as near as possible to the donation site or city.***

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<sup>1</sup> A transcribed conversation in case of my interview with AYSG's Mr. Dipesh Soni is unavailable.

- Referring to Q3 (Functions of the RHA other than food donation, and their significance) the RHA over time has built a huge network of contacts which helps not only in speeding up their processes, but also acting as a central connection point to wishful donors and regular establishments in their contact. I think being non-monetary has a lot to do with the support in various forms that is received from contacts; be it school-related stationery, blankets, clothes or something else. If you are averse to dealing in money, you simply connect two parties who are not averse as you. Now, if a situation may present itself where small amounts of money is to be expended, this is taken care of by volunteers themselves; they do not find it to be a problem when the cause is a noble one to feed street children. It is to the say that volunteers sometimes play the role of ‘wishful donors.’ **The RHA has built an impressive network of contacts which help in not only help them in diverting surplus food to a previously unknown establishment, but also with the help of locals and volunteers living near the donation site, helps in getting an update of the situation before taking a decision to donate at a particular site. All sharing of contacts happens over social media and over call.**
- In Q6 (How a drive location gets selected and could food distribution be made faster) answered by Ajinkya, **I found that three out of the six-odd clusters at Thane were rather lopsidedly located and close to one another. At the same time, there were spots with no cluster around for a considerable distance. It would have been appropriate to divide the locations which would aid in directing the food to a nearer cluster in a shorter time, in the event of an excess food call.**

Thane, in addition to being a city (i.e. Thane city) is also a district (Thane district) with many other cities coming under it. Robins from these cities did not have an option but to travel large distances to volunteer at the Thane Chapter. Therefore, sensing a similar need to feed the unprivileged and for sake of convenience, they formed their own groups and later were successful in turning them into local Chapters at Kalyan, Ulhasnagar and Ambarnath. To provide some perspective, Ambarnath which is part of the Thane district, is almost 34 kilometres away from Thane city. **If a group of members come from distant areas to their nearest chapter, they can, with experience, form a new chapter in their respective area. This will help in reaching out to prevent wastage from a wider audience.**

**Usually donors can and do arrange for vehicles if the food to be carried is in a very large amount, since they do have the means and contacts, and do not have much other options left.**

- Referring to Q7 (Why are most beneficiaries children? Do adults also get fed?), **children are the primary receivers of food as they need to develop their bodies and grow.** The less-fortunate families, when given food, too share it first with the kids and the aged. If these kids are also attempted to educate by incentivising food, they would develop a brighter future for the country.
- For Q8 (The step-by-step process of donation), I have illustrated the procedure of food donation in a simple flow diagram as below:



Figure 8: Surplus food donation procedure of the RHA (L-R).

The safety checks are basic and do not involve any complicated techniques or instruments. Any organisation, before accepting food from anyone checks the food visually, then by tasting it to

check if it is in unspoilt condition. Donors also would not like to serve anyone bad food, the reasons for which we shall discuss in the next interviews with ZFI and AYSG.

*Mumbai and Thane are some of the world's most populated cities, and to cover even a small distance takes a very long time. **The solution to this problem of operating in crowded cities in my opinion is to divide the clusters fairly well within the city. 'Reserve spots', where there are a lot of recipients can be donated to in case of dense traffic; but such spots need to be identified via reconnaissance. The RHA took the correct measure of buying their own containers. These containers can be kept with certain individuals and spread out; in case someone is unavailable.***

- *As seen in Q9 (Are there any regular restaurants that collaborate? On what basis are they chosen?), there are many individuals and establishments genuinely wishing they could do their part to help society. Most of them seem confused how to start, and such non-profit organisations provide them just that platform which they seek. **At the same time, for establishments and people to approach and recognise you as an organisation, you need to maintain a certain standard and must be regular in the work you carry out. Over time this builds popularity and reputation and spreads through social media and word-of-mouth.***

With ZFI, I had been told by Ms. Radhika that she would be happy to do an interview for my research. Initially, I sent her my questions on 24 November via mail. Thereafter, on two occasions of a drive and a meeting, there was no time or place to discuss, and it was decided that calling would be most feasible. So, I got in touch with Ms. Radhika finally on the morning of 6 December to have a discussion for the interview. Here too, as with Ajinkya's interview, sentences have been modified but sentiments conveyed are the same.

For the interview on behalf of Zomato Feeding India, interpretation of observations in italics while concise learning in bold and italics are summarised as follows:

- *From Q2 (About the history of FI and present strength in the Thane chapter), I surmised all the people I saw at the community fridge installation event were not much older than me, as I had thought. **Experience in dealing with food donation and loss should also be shared among newer volunteers in meetings and social media. Otherwise, the newer individuals are hesitant to approach donors who have contacted the organisation with excess food.** I have observed that Meghana, Niranjana and Ms. Radhika are indeed active to take up requests, living up to their initial enthusiasm after joining. Within the newer lot, Mohseen and Akbar, both medical representatives by profession, have been enthusiastically participating. It is not just their job that aids in their participation but also a willingness to help others. James has been active late at night when most donation requests come. All aforementioned volunteers reside in different areas in Thane and are all working professionals. In fact, I was told I was the only student volunteer which accurately coincided with my observation on field.*

***The group needs to contain a volunteer conscious of the city's map and possible regions where food could be donated and is available during the day as well. Usually both these factors are interrelated and many times dependent on one another. The best example of this is rickshaw drivers. And in my observation, some many of them are impressed by our work and genuinely want to contribute in some manner with Zomato Feeding India. I think the spread of the message would require advertisements which is currently lacking in the Thane chapter, as answered by Ms. Radhika in Q7. These advertisements could be placed in visible public spots as simple sentences in the regional language. It would attract a different crowd altogether;***



**one that has not yet been actively targeted by any of the three NGOs I worked with. All of them majorly target the English-speaking city crowds. It would be worthwhile and fruitful to start interacting with the broken/non-English speakers to broaden the network and penetrate deeper into areas that have not been explored yet.**

- *In Q4 (How does ZFI manage being completely non-monetary?), we talked about Zomato funding the various initiatives by ZFI. The Mumbai chapter has a Magic Wheels initiative successfully running. For this to happen, the local chapter must make a tie-up with a large corporate partner which agrees to sponsor meals for more than a hundred people. **Neither have we in Thane identified so many people to feed, nor do we have the kind of corporate presence a Mumbai. Thane city does not have as many companies or corporates. I had asked if a truck can be driven around the city, in Q6; this is exactly what the Magic Wheels does. But for now, it does not seem feasible for the Thane chapter. The donor and consumer base need to be expanded for Thane.***
- *In relation to Q6 (Can the idea of driving around with a truck or stopping at a random location be feasible? Because the same people are fed each time in a single hunger spot), I illustrate the food donation procedure of ZFI:*



Figure 9: Surplus food donation procedure of ZFI (L-R).

**With Zomato Feeding India’s Thane chapter’s process, there is a need to ask for pictures (if not sent) to gauge an estimate of quantity and the presence of containers, which must also be confirmed. Secondly, more hunger spots in addition to just one at the Cadbury junction, Thane need to be found especially when the organisation is focused majorly on eradicating hunger from their respective areas of working.**

**In my humble opinion, this chapter at Thane is missing a strong backbone; that of a dedicated management system. With everyone inexperienced, perhaps expectations are too high out of them. Whatever is at our disposal must be begun with, irrespective of whether anyone joins an excess food drive or not. Asking too much of the volunteers will only lead to dejection of the lead and the non-cooperation and eventual exit of volunteers. But I also think progress will take time, and the learnings gained now must be considered with seriousness and worked upon, in order to propel the chapter upward.**

On behalf of Arham Yuva Seva Group (AYSG), I interviewed Mr. Dipesh Soni, the same person who inducted me for volunteering at the organisation and my sole point of contact in it. Mr. Soni was busy on a personal level and hence had agreed to give me time over call. He first explained to me the structure of the group; that it was started by Guru Namramuni Maharaj in November 2005 with an aim of ‘seva’ or service to others. Hence, all members under their founder are referred to as ‘sevak’s’. From a group of 40 individuals congregating to touch the lives of the less privileged, at Mulund, AYSG has burgeoned into a 1200+-strong group with 50+centres in India and a few abroad (mainly the USA). It envisions to stir a quality of community-work in youth and elders alike where they devote spare time to earn moral and spiritual dividends.

'Arham Yuva Seva' translates to service (Seva) carried out by youth or one with a young spirit (Yuva) who possess virtues of mercy, compassion, dissolution of ego and anger (Arham). The group is driven by people, thus also values and traditions from the 'Jain' faith, a distinct religion on its own. Unlike the other NGOs I worked at, AYSG does not just concentrate on food but is involved in other initiatives as well, of which (excess) food donation is a part. Mr. Soni elaborated on some of such initiatives such as cost-effective cataract operations for patients who cannot afford high medical costs. This is done in collaboration with a hospital or a related facility where costs are incurred by AYSG. Before accepting a patient, a check for genuineness is carried out to see if the condition is truly present. The same procedure applies to dialysis camps that are also organised. Other initiatives include animal welfare, disaster relief etc.

I was informed that as far as food donation is concerned, it does not happen as frequently because of certain limitations. Jain traditions request for the avoidance of underground vegetables (onion, garlic, potato) by which they ensure to not harm or kill even the tiniest of organisms fostering on the vegetables. This greatly limits their pool of donors, but at the same time is an obligation that cannot be parted with at any cost. In case a call for donation does come, the procedure is to firstly accept food from a source of trust; this has been a common theme with the NGOs I worked with. After volunteers reach the spot conveyed by the donor, the next step is to taste it to check quality and freshness, take it to a designated area where other initiatives or even past donations gave been carried out, and donate and at the same time categorically inform people to consume it by that very day to ensure fresh consumption. When asked if the organisation is funded or not, Mr. Soni brought out an interesting fact; that the long-standing presence of AYSG for about 14 years till present has, in addition to creating an expansive network of contacts, instilled a sense of trust and faith in people.

My interpretations (in italics) and learnings (in bold and italics) are summarised as follows:

- ***Trust between the donor and recipient organisation plays a crucial role on the domain of food because any spoilage and the hundreds who consume it fall ill. Even when it is a question of 'surplus food donation', not much compromise can be made. A reputation spoilt will affect future aspirations and relations with people, besides colliding with the law. The attributes of familiarity along with operating for so many years in an efficient manner translates into increasing trust among consumers, also food donors showing active participation and sometimes even paying for arrangements themselves. Some factors that I find can increase the trust within your community are transparency, regular working the word of which is circulated on social media, and a clearly defined cause that is perceived as noble by the public. If one benefits the community by taking numerous measures for their upliftment and well-being, the community shows back its appreciation, and spreads the message to more like-minded individuals.***
- ***A long-standing presence and thereby a deeper connection and trust with the locals, also being well-versed in the geographic area of service, such old non-profit organisations can be apt collaborators for upcoming ones such as the Thane chapter of Zomato Feeding India, to guide them to newer hunger spots and working know-how.***

- Below, I illustrate AYSG's process of donating surplus food to those in need as follows:



Figure 10: Surplus food donation procedure of AYSG (L-R).

**From the figure above, the peculiarities with AYSG's donation method are that donors must be trustable and known to a degree, either directly or indirectly, and that food is given in a nearby designated area most of the time.**

## 7. Discussion

Beginning with a discussion on Hebrok & Boks' (2017) conclusion that the drivers of food waste extrapolate social norms prevalent in a community such as likeability, lifestyles, storage, packaging etc., during fieldwork and in subsequent observations, it was found that most donation requests to the NGOs, driven by surplus food due to a prior event (a party, wedding, corporate function etc.) were made by individuals. Moreover, calls made by such individuals consisted of food from the unorganised sector establishments and local caterers. It brings the consumers' simplistic food preferences to the fore, in addition to a similar kind of lifestyle. In my time, less than a handful of non-vegetarian menus were called upon for donation because they were always quick to get over. If not so, someone or the other would offer to take it up. During distribution of the chicken biryani, the starting quantity for donation was itself in good proportion yet was over without much effort which was not always the case with a vegetarian menu. With vegetarian food, one had to wait for a while for more new recipients to arrive before the food was finished.

My findings suggest that much wastage occurs because the donor is not willing to donate. He is fearful of his food affecting the recipients due to a food safety hazard. If such a case happens, he would lose his customer base and credibility within the catering community and would be liable to face legal action. In many cases, when catering heads, restaurant managers or even individuals were asked to donate any surplus food remaining in the future, a reflexive reluctance to oblige developed. The same host who tries to save face by being overly generous with his guest now does so in a totally different way to a totally new guest i.e. the recipients, in which he refuses to be generous any further for donation. Unsurprisingly and as predicted by Evans (2014), there is an inherent 'anxiety' for the consequences and reputation in the instance of the donated food adversely affecting the health of the recipients. This anxiety is merely socially created due to repeated societal patterns of behaviour that have now become routine. To change this happening is difficult for which Evans (2014) points out the importance of trust and familiarity to be recognised by donors and recipients alike. I found that it was their continuous working since years that gradually built trust between both parties; the donors and recipients. AYSG was unfailingly a community-oriented group through means of their location in Jain-majority areas and the food, which had strict limitations. This was in complete contrast to the RHA and ZFI which had no affiliation to a community and consisted of volunteers from all backgrounds.

Schanes et al. (2018) found the factor of people's perception of accepting food waste to be below one's level as an underlying cause of wastage, which is also coherent with my own learnings from the petrol station owner's narration specifically regarding the community fridge. Here, the fridge, when noticing lower sections of recipients as taking food from it upon touching, was decided to not visit again. Such a sort of perception was rife mainly among those economically just above these recipients, comprising of autowalas and small-scale workers. They automatically considered it to be 'below their level' to accept the food. As Schanes et al. (2018) suggest sharing food as the respective prevention strategy, in my findings, this did not happen. Rather, anyone irrespective of background was handed over food fairly by a staff member of the petrol station.

My findings on ZFI's Happy Fridge was unpleasantly revealing and elucidated how food (leftover or otherwise) donated with a good intention may very likely turn into what can be termed 'waste', the category at the extreme end according to the Evans' (2014) theory of food wastage. In this scene, the incoming of food was coming at a continuous rate into the 'bin' i.e. the Happy Fridge, but a similar flow-pattern was not observed while going out and into a conduit. As a result, it was rather

tedious to manage donations and if not for multiple enthusiastic hands, such an initiative can quickly go wrong. To add to the issue, a pervasive unawareness among community members on proper storage, a lack of know-how on the shelf-life of the food (surplus or prepared for donation to the fridge) and confusion on the part of recipients and the petrol station staff alike on the edibility of food (Schanes et al., 2018, pp. 978-991) created further problems. I did not observe any guidelines; steps which described the pre-requisites for a proper donation such as appropriate container material, as well as information about shelf-life or food date labelling. The only guidelines were in English, while most customers were not meant to be the English-speaking population by and large. This was a case of improper leftover management (Schanes et al., 2018, pp. 978-991).

Upgradation of storage and packaging techniques have been considered one of three interventions by Hebrok & Boks (2017). In my view, present storage and packaging mechanisms of food in (such as in containers) were non-uniform with no organised storage guidelines available to donors. For the donation of liquid-y food items such as lentil soups (or 'dal') or gravies wrapped in improper packaging (like loose plastic) was a difficult affair, as was trying to consume the food out of it. Not to mention the deleterious effects of plastic and a low-shelf life. At one of my observations with ZFI, the bag containing a large quantity of the particular item was given to merely whoever was willing to take it since no form of serving was possible unless the packaging was changed. ZFI's initiative of the Magic Wheels consists of a controlled storage environment and is meant to carry food extended periods of time, which could have been employed here.

Schanes et al. (2018) mention an interesting statement in their paper about incentives encouraging food producers to develop their existing process. This is completely in agreement with my own findings; a corporate backing can help you as an NGO in multifarious ways. Ms. Radhika in her interview with me narrated that after Zomato took over Feeding India, the NGO had been benefitted by means of financial supplementation much greater in addition to their own. This helped in spreading their expensive projects of the 'Magic Wheels' and the 'Happy Fridge' to newer locations in India. The company funded the requirements for containers, advertisement banners etc. for all locations of ZFI. Overall, processes within the NGO had since become more streamlined and more wastage data was open to public access, the latter being a solution by Schanes et al. (2018) to generate awareness.

Donors (restaurant managers or even individuals with surplus food) did not have the know-how of possible locations to donate their food, especially considering at the quantity of the food to be given. The obvious next step was to contact NGOs who worked specifically in this area. If having excess food to be donated, the donors could directly connect with the NGOs without having to interact with recipients (Schanes et al., 2018, pp. 978-991). The RHA and ZFI had an extensive presence on multiple social media platforms. They were widely recognised due to their own social media initiatives, but also by their presence in popular news reports and case studies that brought them into the attention of masses online. Social media by the NGOs was used in two ways. WhatsApp groups communicated quick updates including food donation requests, location sharing between donors and volunteers and posting pictures of all successful drives. In fact, the RHA had devised a successful WhatsApp group system to segregate volunteers according to their contribution and experience. Any and all updates posted were noted by head coordinators and employees of the RHA and ZFI respectively. Then, volunteers (of RHA) and a social media team (employees and/or volunteers of ZFI) would turn these updates into statistics and graphics which served to keep maintain an overview of work (Hebrok & Boks, 2017, pp. 380-392) as well as advertisements on latest social media platforms. The platforms were also used to convey the effects of wasting food as

modes of generating awareness. Unfortunately, advertisements were in English and so reached a considerable yet certain section of the population. I was not exposed to use of social media by AYSG due to my short stint there.

The Robin Hood Army's Academy was involved in imparting education to children, and in this manner incentivising food with education so that parents encouraged their kids to go to school. In a similar manner were ZFI's 'Poshan to Paathsala' initiative and AYSG's education support to less-privileged children. All this is necessary for the future of the child. But nowhere (on NGO websites or the field with the RHA Academy) did I observe a focus of the NGOs on teaching kids to not waste their food. Most of the children learnt school-based syllabi while teaching about food wastage and its factors pertaining to Indian society do not necessitate a connection between prior knowledge and future response, which was proposed as a mitigation strategy to spread awareness, by Hebrok & Boks (2017). It could be surmised that their association as beneficiaries of the RHA (or any other NGO for that matter) would inform them about the adverse consequences of wasting food due to their own learnings by familiarising them with the 'motto' of the organisation, but it is still unclear. Hence in this instance particularly, the assertion by Hebrok & Boks disagreed with my own findings.

There are, however, aspects that the literature reviews missed out which I consider to be important, and even more so in the Indian setting because of the way food donations are carried out by NGOs. Having a strong contact with beneficiaries, of which some double as informers or helpers is of much significance. Such individuals provide a medium of connection between the NGO and the recipients in the event of food donations, as well as reduce any existing apprehensions of the recipients, encouraging them to step forward and get involved in receiving surplus food. This brings me to the next factor of building a network with local actors and food-serving/accepting establishments. In the time that a substantial quantity of food gets left due to unavailability of recipients in one spot, a strong network would aid in transferring the food in due time before spoilage, to another spot. Moreover, having such actors as night-shift workers, small businessmen or autorickshaw drivers travelling daily within the city will help in donations late into the night and distant areas which are otherwise not feasible for most volunteers who work as professionals.

## 8. Conclusion

The aim of this thesis is to gain insight into the process through which surplus food from various events in society, which now holds a lower value to the donor, is repurposed and donated to a less-advantaged recipient thus increasing its value in a new category. In addition, part of the aim is to analyse the effectiveness of the current donation-reception system and identify causative factors which are specific to the Indian societal scenario. Finally, in order to optimise the current procedure, we suggest simple steps for improvement by drawing learnings upon comparison between the different non-profit actors and their unique working styles.

Reflecting on the research question, food waste is repurposed by NGOs which facilitate a connection between a donor and a recipient. Wastage occurs mainly due to the inherent sociological construct that an individual is embedded within and preventable gaps in the existing repurposing process of NGOs. There are factors peculiar to the Indian societal context which may or may not be applicable elsewhere. Each of the organisations works differently in a specific sphere (such as use of technology, storage and packaging techniques, ties with community etc.). Each of them has their own strong and weak points; learnings can flow fluidly between the three to make the process more effective and solutions exist.

Food is considered as 'waste' which is determined by the manner in which it is disposed. The basic steps to surplus food donation involve a donor, an intermediary party and the recipients. With the intervention of NGOs like the RHA, ZFI or AYSG at the stage where food becomes 'excess', it can be salvaged before it becomes waste. Hence, in keeping with the chain proposed by Evans (2014), these organisations act as 'bins', or possible modes of repurposing. After evaluating necessary parameters of the received food regarding hygiene and spoilage, it is taken to a hunger spot to be donated to less-privileged persons. At a point when food becomes fit to be donated and is subsequently served, it escapes the chain out of the 'bin' (denoted by curved arrows) to a new conduit i.e. no longer is this food 'waste' but a necessary form of nourishment and welfare to less-fortunate recipients. It is a widely held belief that a guest must be treated by the host as greater than himself, and this is a matter of reputation and social status for the host to maintain at all costs (George, S.K. 2009, pp. 29-47). Food considered to be 'proper' is prepared in a larger quantity than required. Due to hesitation on the part of the donor to participate in donation to keep himself out of a perceived trouble, an anxiety is created due to repeated patterns of behaviour of society (such as treating waste as 'improper') which have become normalised over time.

Most cases of donations came from the unorganised sector restaurants. In this sector, there is no system of an 'a la carte' menu but bulk ordering or an unchangeable menu (Adhikari et al., 2009, pp. 4-21). Drawing a hypothesis from this, one can expect that the likelihood of food waste arising from an unfamiliar or less-liked menu could be more. Similarly, when paying for the food, from an a la carte menu, wastage could be less. The society, based on its likes and dislikes, forms definitions of what should be 'proper' and 'improper' which determines the shift of food from 'excess' to 'waste'. It highlights the importance of both likeability while deciding menus, as well as familiarity within the community for ease of donation. In fact, the emergence of NGOs helps keep donors anonymous and reduce their anxieties (Evans, 2014, pp. 89-101). Trust and familiarity within the community was one of the highlights of AYSG's operations. Donors came forward, offered to donate and asked nothing in return.

A community fridge initiative could also lead to wastage due to higher rate of food inflow compared to the outflow. It is mainly due to inadequate information on the part of NGOs and complete unfamiliarity on the part of consumers. Specific to this situation, we see an invisible class divide between the relatively lower sections of society, which again stems out of unawareness and strongly held beliefs.

With respect to storage and packaging, with the RHA and ZFI, most recipients are asked to bring their own plates and bowls which many do not possess. In this event, it becomes difficult to provide them with liquid items without dropping and wastage. The lack of a standardisation is seen even with a few donors who donate food in loose plastic which is not healthy and difficult to handle while donation. Loose plastic lead to unequal distribution, i.e. a person willing is handed over the whole bag. It then so happens the recipient cannot consume the large quantity in one-go and ends up wasting the rest of the food as he does not have a proper place (read: refrigerator) to store the food well. AYSG led the way to the solution by providing every one of their benefactors with sturdy steel tiffins.

The field of food wastage prevention is a time-bound effort which requires extensive use of technology to quicken processes. Social media helps in informing the masses about latest events and statistics, in addition to helping volunteers find donors' locations or connect with them. A well-known brand such as Zomato as the face of ZFI acts as a strong advertisement to attract more volunteers and communicate the impacts of food wastage. Overall, the effects of corporate backing are positive with respect to popularity, funding a cluster's needs, data processing and access to public.

At present, educational activities sponsored and conducted by the RHA, ZFI and AYSG focus on school syllabi and not much, if not nil, attention is paid to create awareness amongst the child benefactors, which is the most important step as suggested by Hebrok & Boks (2017). As Gjerris & Gaiani (2013) suggest, tackling the problem should be from within the community's inner core; its beliefs, traditions, routinised habits of perception are what need scrutiny and successful change. There needs to occur a shift from being lackadaisical about food wastage to regarding it as morally wrong. That in the case wastage occurs, to 'gift' it to someone and not 'get rid' of it. Awareness generation amongst the masses holds the key to change, however subtle; it needs to be in the form of door-to-door campaigns informing of adverse impacts of wastage by producing the relevant data. Moreover, clear guidelines on shelf-life of leftovers, labelling of food dates before keeping in a community fridge is also required (Schanes et al., 2018, pp. 978-991). Important is to impart information in language that can pervade through social barriers and break any prevalent fixations of subconscious class-divides; regional languages must be given priority here.

Some further observations are that the Robin Hood Army has an uneven presence in Thane, with areas group over two ends of the city. Identification of more (reserve) areas will help them to distribute food quickly to a nearest location, thus maintaining food freshness. Zomato Feeding India lacks adequate hunger spots, with just one at present. They are currently also experiencing a shortage of regular volunteers during surplus food calls. To adapt to the latter, regular drives in the form of 'priming' as conducted by the RHA would not only help build a stronger network of donors but also reduce the inertia in taking initiative by volunteers and help them get a basic idea of situations that could be faced.



Networking with locals to find more spots and inducting members whose careers demand them to travel throughout the city or work in the night can help locate hunger spots as well as deal with late-night surplus food donation requests. Arham Yuva Seva Group lacks the required social media presence, which is key to boost popularity among prospective donors, recipients and volunteers alike. Taking inspiration from the RHA and ZFI, they could organise events such as hyperlocal collaborations to promote their services.

In conclusion, the problem of food wastage runs deep in the attitudes of society. Recognising the peculiarities and problem-areas that promote such a phenomenon as well as optimising the current chain of NGOs will help in reaching the food to far more people who really need it.

## 8.1 Personal Reflection

On a personal note, the project was very enjoyable. It taught me to interact and adjust with people of all ages and backgrounds, teamwork and the essentials of team-management. I enjoyed observations, active participation, and providing suggestions during my fieldwork as my most well-liked activities. There were indeed downsides; the research was my first time working through the social sciences perspective, and I erred in the recordings of my interviews through transcription. It took many days of waiting, numerous rejections and an expansive use of any contacts at my disposal to finally meet the few people that I did. But all this has been a great learning experience that has quipped me with new skills for the future, also because of the uninhibited support of my supervisor Dr. Joost Jongerden, to whom I am thankful.

For future research in the domain of food waste, the concept of community fridges looks to be a promising subject, as it has seen a boom in past years and contrary to the excitement generated around, problems of excess food storage and spoilage do exist, hence requiring attention.

## 9. Appendix

### 9.1 Interview Questionnaire

#### 9.1.1 To the foodbank regularly serving RHA:

1. How did you get into this business (starting, purpose)? How long has it been till now?
2. How long of an association with RHA? Any other clusters or organisations you deliver to?
3. RHA being non-monetary, what is the source of your fund to make the food?
4. How is the menu decided? How do you estimate quantity?
5. Has excess food ever come back to you? What happens then?
6. Any trends of food consumption you have observed from the past?
  - Have the poorer people increased in number?
  - Is wastage more nowadays? If yes, why do you think?
  - Have people become choosy these days? Especially when they get served by the RHA regularly?
7. What in your years of experience do you think is the driver of waste? Is it *“Atithi devo bhava”* (Translation: Guest is God), *“I have never learnt about it in school, so I am unaware of my country’s situation and sustainability”* or something else?
8. Do you think something can be done here (fines, education, subconscious cues)? Any steps you take to reduce your potential wastage?
9. So, the plan is to keep continuing? Any changes or upgrades planned for the future?
10. Do you have contacts you can guide me to (foodbanks, restaurants, people from RHA/outside) that may be able to help?

#### 9.1.2 To Ajinkya, Coordinator, Robin Hood Army Thane Chapter:

1. How did you come to join? How long has it been till now? What is your designation at the RHA?
2. Tell me about the history and present strength of the RHA, its Thane chapter (Number of members, core members).
3. Does the Thane RHA perform other functions too? People think it’s doing exclusively food donations. What are the other functions and why are they important?
4. What is the idea of being totally non-monetary? How is it managed?
5. How big is the issue of food wastage in your own observations all these years? Is it increasing and worrying?
6. How is the drive location selected? Many spots are still uncovered. Ever thought about an alternative (driving around with a truck or stopping at a random location)?
7. During the drives, I notice we feed mostly kids. Why is that? Don’t the elders need to eat?
8. Could you describe the procedure for an excess food drive from start to end? What are the challenges faced?
9. Any restaurants that work with you regularly? How do you choose/approve of them? Is it possible to contact them?
10. Apart from excess food donation, how does RHA tackle food wastage (does it use tools such as education for example)?
11. What impact has been made on the food wastage issue? Do you have any statistics of it?
12. What is the future of the food donation project carried out by the RHA? How do you plan to upgrade, if you do?
13. What message would you like to convey to the masses to cut down on wasting food?
14. Any contacts of restaurants, foodbanks, similar NGOs, RHA members who can further guide me to more information?

### 9.1.3 To Mr. Dipesh Soni, Sevak, Arham Yuva Seva Group:

1. How did you join? How long has it been till now? Do you hold a specific designation?
2. How did this organisation come into being? Present strength (places, members).
3. What are the functions of your organisation?
4. How is it run? Is the NGO funded or runs on a non-monetary basis?
5. Can you describe the procedure for surplus food donation?
6. What are some limitations to accept the food and what are its reasons?
7. Apart from donating food to the less fortunate, does the organisation take part in other initiatives too?
8. Any restaurants that work on a regular basis? Is it possible for me to contact them?
9. How has the impact of food donation been?
10. What is the future, and would we be able to see any upgradations to the working of AYSG?
11. Do you have a message to everyone on how they can cut down on wastage?

### 9.1.4 To Ms. Radhika, Lead Coordinator, Zomato Feeding India Thane:

1. How did you come to join? How long has it been till now? Your designation at FI?
2. Please tell me about the history of FI and present strength in the Thane chapter (Number of members, core members).
3. If the Thane chapter is new, I wonder which was the first that was started in the state (of Maharashtra).
4. How does ZFI manage being completely non-monetary?
5. From your observations, how big is the issue of food wastage? Is it increasing and worrying?
6. Can the idea of driving around with a truck or stopping at a random location be feasible? The petrol charges could be divided unofficially among the group. My reason for asking this is because we keep feeding the same people each time, we get a food donation request.
7. What are key challenges faced?
8. Any restaurants/foodbanks that work with you regularly? How do you choose/approve of them?
9. Apart from excess food donation, how does FI tackle food wastage (does it use tools such as education for example?)?
10. Where do you see ZFI heading in the future? What is your message to anyone all the people out there?

## 9.2 Principal Actor Interviews

### 9.2.1 Ajinkya, Coordinator, Robin Hood Army Thane Chapter

***Question 1: How did you come to join? How long has it been till now? What is your designation at the RHA?***

***Ajinkya:*** So, I joined the RHA in April 2016. I was looking to volunteer at some organization and RHA had no registration fee or any compulsion regarding participation. It's been over 3 years now. There's no hierarchy in the RHA. The volunteers who manage a locality (or a Chapter) are called coordinators which I've been a part of for a long time, and I am a Robin just like everyone else.

***Question 2: Tell me about the history and present strength of the RHA, its Thane chapter (Number of members, core members).***

***Ajinkya:*** RHA Thane was founded in 2015 with about 5-10 active Robins. We used to approach restaurants to sponsor meals for 20 to 50 people every weekend. Come 2016 and we grew to 30-50 Robins out of whom 15-20 were active. We had Holachef as our regular sponsor who provided meals for 50-100 kids. By 2017, there was an increase to 80-90 Robins and 30 active ones. The regular sponsors Holachef, now along with foodbanks helped us in serving 100-200 kids every weekend. The following year saw us growing further to 120-150 Robins with 50-60 active volunteers. This year, hotel Byke stepped in as the regular sponsor and with foodbanks, helped us serve close to 300 kids every weekend. At present, we have a strength of about 200-260 Robins of which 85-90 are active. Foodbanks and the hotel Byke, Thane help us serve roughly 600 kids every weekend as part of our regular food drives.

***Question 3: Does the Thane RHA perform other functions too? People think it's doing exclusively food donations. What are the other functions and why are they important?***

***Ajinkya:*** The RHA is a zero funds organization, which means we do not accept any kind of monetary transactions. We directly collect cooked or excess foods from the donors or callers respectively and distribute the same within the Thane chapter's clusters, or hungry people in the streets. During surplus food drives, Robins personally check the food and ask donors all the necessary information to confirm that food can be taken for distribution, and only then is it picked up.

Any wishful persons who want to donate are through us, also connected with known caterers who accept money digitally. Monetary transactions are made solely between them and only once the food is confirmed, are we informed to collect and distribute the same.

Apart from food donations to the less fortunate, we are also involved in educating kids about their rights and basic etiquettes which can help them secure a better future. The basic accessories including stationary is directly sponsored by donors and no cash is accepted or allowed to be offered. Moreover, the RHA conducts activities which are related to our environment because it is important to also contribute for Mother Earth. To name you a few successful activities, we have participated in activities like cleaning the beaches in Dadar with the Beach Warriors, tree plantation drives and plastic collection drives with Urja Foundation etc.

***Question 4: What is the idea of being totally non-monetary? How is it managed?***

***Ajinkya:*** The idea of being non-monetary basically is to keep transparency in the organisation. We collect no cash as mentioned above which also aids in generating trust among our donors and restaurant partners. During big events, we connect the sponsors or donors with caterers and restaurants who make digital payments and whatever transactions are done, are between those two parties. The Robin Hood Army is not involved in those transactions in any way whatsoever. We are only involved in collecting the food, the stationary, clothes or whatever materials that are to be offered. This is how we are able to manage without taking any cash or accepting any form of

monetary payment. Moreover, any the small expenses incurred during the drives or an event are managed by the Robins on a personal level.

***Question 5: How big is the issue of food wastage in your own observations all these years? Is it increasing and worrying?***

***Ajinkya:*** The issue of food wastage is serious because most of us are not aware of the reality. India is among the top countries where food is available but does not reach the ones who are in need and hence there is malnutrition in the country. You can imagine the amount of food that is wasted. Just to give some facts, every 10 seconds a child dies because of hunger. Hunger kills more people than malaria terrorism and AIDS combined. Eighty-two percent of the hungry people are living in countries which have surplus food. One in every 8 people sleep hungry every night. So, the problem is not unavailability of food but the access to the food that is being wasted upon not reaching the lesser-privileged recipients.

***Question 6: How is the drive location selected? Many spots are still uncovered. Ever thought about an alternative (driving around with a truck or stopping at a random location)?***

***Ajinkya:*** A drive location is selected once Robins visit the specific areas or clusters and have a conversation with the locals living over there. We gather information about their livelihoods, whether their kids go to school or not, and most importantly if they be agreeable to accept the food that we offer. We believe that food is just a medium to connect with the people, what do you do next is what really matters.

For expansion of any chapter, we consider if there are enough Robins who can manage those new localities (i.e. future Chapter areas) so that we can sustain those drives in the long run. To give you an example, in 2017, we decided to expand beyond Thane city and a few Robins from this Chapter started drives in Ulhasnagar. Today, we have expanded to Chapters in Dombivli, Kalyan, Ulhasnagar and Ambernath among other locations, which are now independent Chapters like Thane.

There are many areas in Thane which we may not have reached yet, but as soon as more Robins join us, we will be able to, and in a sustainable manner. As we are a no-funds organisation, random truck drives are very difficult for us to implement unless we get such enthusiastic donors. Although we do conduct night drives where Robins walk on the streets near the Thane railway station and feed the ones who have been hungry for days, including kids and the aged.

***Question 7: During the drives, I notice we feed mostly kids. Why is that? Don't the elders need to eat?***

***Ajinkya:*** In our opinion, it is because we feel that it is important and necessary to connect with them and try to help them build a better future. We also feed elderly people and women whenever we have more food. Like you must have observed in your volunteering time, many families have the men of the house working as labourers or a member working in a small-scale job. Hence, we don't want them to depend on us or develop a wrong mindset of not working and still getting food to eat.

***Question 8: Could you describe the procedure for an excess food drive from start to end? What are the challenges faced?***

***Ajinkya:*** Firstly, we get a call from the donor after which we ask them basic questions like about the quantity, time of preparation of the food, if they have containers etc. We also tell them to send us a few photos which we share with the team. Once we get the details, they are shared in the WhatsApp group. Whoever is available to pick up confirms in the group that they are going to collect. The concerned Robins will call the donor and ask for the location and other details and reach the spot. After that Robins check the food by tasting it personally. Once they are assured that the food is safe

for consumption, it is collected in containers and taken to the nearest cluster or according to the quantity of food.

There are many challenges faced: namely the vehicles to carry food or to go to the drives. Sometimes there are no volunteers available to collect the food. We have also faced issues where food was spoilt because of heavy traffic which we had to dispose of. Earlier, we used to have issues collecting food for more than 200 people (because of a lack of containers personal to the RHA) but now we have got 48 to 55 containers at different localities, so things have become much smoother.

***Question 9: Any restaurants that work with you regularly? How do you choose/approve of them? Is it possible to contact them?***

***Ajinkya:*** Currently, we have Byke hotel as our regular donors. They are associated with us because they like the idea of feeding kids and helping them get a better life. We were previously associated with Holachef because of similar reasons. We generally do not share contacts of our sponsors to avoid them being misused by anybody wishes to, as we have faced some issues in the past.

***Question 10: Apart from excess food donations, how does RHA tackle food wastage (does it use tools such as education for example?)?***

***Ajinkya:*** We conduct what is called a 'sticker drive', which is a measure to generate awareness among people and restaurants alike, about the issue of food wastage and suggests ways to cope with it. We also conduct small-scale surveys which help us spreading word about the Robin Hood Army, and work carried out by it. We get invited to corporate events or functions, such as parties or certain ceremonies, where we talk about food wastage and try to educate people about the reality of our country regarding food and malnutrition.

***Question 11: What impact has been made on the food wastage issue? Do you have any statistics of it?***

***Ajinkya:*** It is very difficult to give measured statistics based on the food that is distributed. We can only provide the approximate amount of people that are fed on a weekly basis which we also have collected in data sheets. We measure is the smile on the person's face when there is a meal maybe, possibly after many days. We measure how happy the kids are to learn and play, with you being a part of their life. Both are priceless. What we have affirmatively measured is the number of kids getting enrolled in schools on part of the RHA. As of now, we have enrolled more than 10 to 15 kids and helped other organisations enrol about 40 kids all of them are now pursuing their education. We believe that as more years pass by, people will become more aware about the problems related to food wastage. From where we began in 2015 in Thane, today we have come a long way and to give you some figures, we have approximately saved food worth ₹25 to 40 lakhs (or €31,700-50,720).

***Question 12: What is the future of the food donation project carried out by the RHA? How do you plan to upgrade, if you do?***

***Ajinkya:*** The future remains the same: To eradicate hunger from our country and globally, and we will work towards this goal for the times to come.

***Question 13: What message would you like to convey to the masses to cut down on wasting food?***

***Ajinkya:*** If you do not realise how important a bite of food might be then you need to step out and join the Robin Hood Army to experience the reality we live in today. Value the food that you eat because somebody else does it more than you do but does not even get a bite of what you are going to have the next day, week, month or year.

***Question 14: Any contacts of restaurants, foodbanks, similar NGOs, RHA members who can further guide me to more information?***

***Ajinkya:*** You can connect with feeding India, Roti Ghar, Akshay Patra which will help you gather more information related to this topic.

## 9.2.2 Radhika, Lead Coordinator, Zomato Feeding India Thane

***Question 1: How did you come to join? How long has it been till now? Your designation at FI?***

***Ms. Radhika:*** I had always thought of volunteering, but never found the right opportunity. Finally, I happened to quit my job two years ago, which was the perfect chance to search out to fulfil my ambition for volunteering. I then applied to various non-profit organisations, including to Zomato Feeding India (then only Feeding India) through their website around December 2018, and by January 2019 was inducted into the organisation as a volunteer. My designation is as the leader of Zomato Feeding India's Thane chapter. I communicate with a few ZFI employees directly for any requests (for example, to secure funds for food containers) and updates (informing about the situation of the Happy Fridge), and any messages that ZFI has, is relayed to all us volunteers by me in our 'FI – Thane' common WhatsApp group.

***Question 2: Please tell me about the history of FI and present strength in the Thane chapter (Number of members, core members).***

***Ms. Radhika:*** At the time of joining in January 2019, I was told that a fresh Chapter at Thane was just started. Initially, there were ten to twelve volunteers with the city lead who was a young student. The student had to go abroad for his studies, which left the group without a lead. Feeding India then asked me if I could lead the group, more so because they thought I was the most appropriate because I could devote more time to the job, and my active role during drives; I agreed to the request. At the time, there were four main active volunteers out of the ten; me, Meghana, Niranjan and Raj. This carried on till September and October, till the first Happy Fridge was installed in Thane. The attraction of new volunteers swelled their number to a hundred in total, but only around a third of them can be considered active.

***Question 3: If the Thane chapter is new, I wonder which was the first that was started in the state (of Maharashtra).***

***Ms. Radhika:*** The Kolhapur (about 390 kilometres from Mumbai) chapter of ZFI is the most popular and assisted chapter of Maharashtra because of being a region sensitive to natural calamities. During the event of a flood, the organisation noticed a local woman named Amrapali helping her fellow citizens in whichever way she could; by providing food and water to those in need. They decided to collaborate with her and donate food-grains and other basic food ingredients, which over time was converted into a whole chapter at Kolhapur. Now, Kolhapur is not a financial hub like Mumbai or Thane, but is more inclined towards the agricultural dimension, which implies people are not as busy for as long a period as they are in the cities. So, the Kolhapur chapter's volunteer composition is an insight for us to follow suit: it is very helpful to have in our team volunteers who belong to the non-corporate, non-student domains and thus can devote more time to excess food requests from donors.

***Question 4: How does ZFI manage being completely non-monetary?***

***Ms. Radhika:*** When ZFI says it is a non-monetary group, it only means to say, "We do not fund you". The organisation though, indeed gets funded from willing parties such as individuals, businesses, corporates and restaurants. These funds are all collected and managed in a central account which is property of Feeding India and will be in their possession even in a situation where Zomato does not

collaborate with them. The funds are used to provide money for necessities (grains, food containers etc.) to all chapters in the country. They were used to also fund the Happy Fridge and Magic Wheels initiatives, even give salaries to the handful of employees. But with the backing of Zomato, these are taken care of by the corporate. With the taking over of Feeding India by Zomato in July 2019, responsibilities and acknowledgements have been made quite visible and streamlined.

***Question 5: From your observations, how big is the issue of food wastage? Is it increasing and worrying?***

***Ms. Radhika:*** Wastage is always there. But what needs to be understood is one of the biggest reasons for this is the non-cooperation of caterers to donate. They do not want to donate, because they are scared that their reputation will be affected if their food turns out to be spoilt. That trust factor and that bonding which would make them donate their food to us, needs to develop. On the other side, because of a recent Government of India directive, municipal schools, orphanages and old-age homes under them do not accept cooked food. This is because of their learnings gained from past incidents. Now if we want to donate them something, we must give them raw grains, rice, salt, sugar etc. but not excess food. So, on both sides, there are certain challenges and hesitations. Nevertheless, there are some who are impressed by our actions and want to genuinely help. While others turn their faces away.

***Question 6: Can the idea of driving around with a truck or stopping at a random location be feasible? The petrol charges could be divided unofficially among the group. My reason for asking this is because we keep feeding the same people each time, we get a food donation request.***

***Ms. Radhika:*** That does not seem feasible because almost nobody would be willing to dole out money from their pockets for each drive, for this is a voluntary organisation. In addition, who would be ready to take out their car every time? We need to find more hunger spots, which we are trying to locate since the past few weeks. For this, we need the support and cooperation of our volunteers.

***Question 7: What are key challenges faced at present?***

***Ms. Radhika:*** ZFI Thane does not get the same attention from either the masses and media, or the management committee, as for instance, our counterpart in Mumbai does. We have been long requesting funds for advertisement of the organisation in Thane, in the form of banners and such, but the request is still pending. Processing requests takes more time here. As you would know from attending our meetings, we have decided to pitch in our own funds and make the necessary arrangements for advertising. When the request gets processed by ZFI, we can reimburse the money. The glamour of the Happy Fridge installation has receded, and we would like to keep it floating by organising events around it (for instance, celebrity inaugurations or visits). You would know that each volunteer needs to fill-in his details in an Excel sheet that can be accessed by everyone; but many individuals have not filled it because of which it is difficult to get a proper idea of who is involved with us and who is not. We also need volunteers for daytime to fulfil requests, because when everyone is at work, I have to refuse the calls for donation. There are autowalas (Rickshaw drivers), small-time businessmen who are available at these hours. For instance, our volunteer Mohseen is a medical representative. His job involves going around the city on his motorbike and meeting doctors. Such jobs of which travelling within the city is a part are required to meet all of our calls successfully.



***Question 8: Any restaurants/foodbanks that work with you regularly? How do you choose/approve of them?***

***Ms. Radhika:*** At present, we are still in a stage of infancy and are yet to establish ourselves. So no, at the moment, we do not work with anyone regularly.

***Question 9: Apart from excess food donation, how does FI tackle food wastage (does it use tools such as education for example?)?***

***Ms. Radhika:*** We do, but not at this chapter. Again, because we are still learning ourselves.

***Question 10: Where do you see ZFI Thane heading in the future? What is your message to anyone out there?***

***Ms. Radhika:*** We need more active volunteers to achieve successful food donations, find hunger spots, help in networking with corporates and restaurants etc.

- I. Zomato is Delhi NCR (North Central Region) based food delivery platform, currently one of the largest food aggregators operating in 24 countries and more than 10,000 cities globally. The reason for the collaboration between the company and the non-profit is because both have a common goal of ending hunger and food wastage in India but also globally. With the acquisition, Feeding India will be part of Zomato's CSR initiative. The company will be responsible to fund salaries of ZFI's employees and carry out some of the non-profit's core aims. It includes the revamping of Feeding India's website and development of the 'Feedi.ng' app which will connect donors with volunteers. According to the company, the app is slated to serve an impressive 100 million individuals per month. Despite the move, Feeding India will continue to remain non-profit and any money it raises will be only with itself. The team-up has resulted in ZFI achieving a hike in donations from 78,300 in December 2018 to 1.1 million meals a month. It has caused a rise in the number of city locations served from 65 to 82, and the volunteer count has grown from 8,500 to 21,500 (Soni, 2019).

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## 11. Glossary

<b>Aahar</b>	Nutrition
<b>Ambernath</b>	City in Thane district 34 kilometres from Thane
<b>Arham</b>	Concept of decreasing negativity and developing virtues in oneself through selfless service
<b>Atithi Devo Bhava</b>	Common Indian saying that means “Guest is God”
<b>Autowala</b>	Rickshaw driver
<b>AYSG</b>	Arham Yuva Seva Group; a youth (or young-spirited) service group
<b>Beach Warriors</b>	Thane-based NGO
<b>Bhandup East</b>	Mumbai suburb 11 kilometres from Thane
<b>Chicken biryani</b>	Spiced rice cooked with chicken
<b>Dabbawalla</b>	Tiffin-men of Mumbai
<b>Dal</b>	Soupy lentil accompaniment
<b>Dombivli</b>	City in Thane district 27 kilometres from Thane
<b>Drive</b>	A drive is an event of the NGO on that day. It could be a (a.) Regular drive which happens weekly, and thus a steady donor is arranged to provide food to the people, or (b.) Excess/Surplus drive wherein a call comes from the donor to distribute the excess food on a short notice.
<b>Gurgaon</b>	City near Delhi in the North-Indian state of Haryana
<b>Happy Fridge</b>	Initiative by Feeding India
<b>Kachcha</b>	Poorly built
<b>Kalwa</b>	Suburb of Thane city
<b>Kalyan</b>	City in Thane district 22 kilometres from Thane
<b>Kolhapur</b>	City in Maharashtra
<b>Magic Wheels</b>	Initiative by Zomato Feeding India
<b>POC</b>	Person of Contact
<b>Poshan to Paathsala</b>	Nutrition to School
<b>Powai</b>	Mumbai suburb
<b>Pulao</b>	A milder form of spiced rice
<b>Radhakishan Lalchand Petrol Pump</b>	Place of installation of the Happy Fridge
<b>RAHAT</b>	Relief
<b>Raita</b>	Yoghurt accompaniment made from vegetables, salt and some spices
<b>RHA</b>	Robin Hood Army
<b>Sahay</b>	Support

<b>Seva</b>	Service
<b>Teen Petrol Pump</b>	Area in Thane where the Happy Fridge was installed
<b>Thane</b>	Unless specifically mentioned, it means Thane city. The city is part of a larger district with the same name.
<b>Thepla</b>	Spiced bread or roti
<b>Ulhasnagar</b>	City in Thane district 25 kilometres from Thane
<b>Upashraya</b>	Monastery or place for wandering monks to stay and meditate
<b>Urja Foundation</b>	Mumbai-based NGO
<b>Yuva</b>	Youth
<b>ZFI</b>	Zomato Feeding India