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Hunger in a food lover's paradise: Understanding food insecurity in Singapore

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in Singapore

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CONTENTS

List of Illustrations	4
Acknowledgements	5
Executive Summary	6
1. Background	8
● Food Insecurity in Singapore	9
● Singapore's Food Support Landscape	10
2. Methodology	12
● Phase 1: Interviews with Food Support Organisations	13
● Phase 2: Survey of Singaporeans and Permanent Residents	13
3. Analysis of Findings	16
● Who Experiences Household Food Insecurity	17
● Needs Met by the Existing Food Support Systems in Singapore	20
● Challenges and Gaps in Service Provision	23
4. Reflections and Recommendations	28
Notes	32
Bibliography	34

LIST OF ILLUSTRATIONS

List of Tables

Table 2.1 Classifications for defining food insecurity

Table 3.1 Food support provision in Singapore

List of Figures

Figure 2.1 Definitions of mild, moderate and severe food insecurity

Figure 3.1 Distribution of levels of food insecurity in the study sample

Figure 3.2 Distribution of household food insecurity by income

Figure 3.3 Food insecurity experienced due to time constraints by age

Figure 3.4 Distribution of household food insecurity by household type

Figure 3.5 Severely food insecure households receiving food support

Figure 3.6 Frequency of food support received by severely food insecure households

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EXECUTIVE SUMMARY

This report provides a deeper understanding of the food insecurity situation in Singapore. Food insecurity refers to the lack of physical and/or economic access to sufficient, safe and nutritious food. The report sheds light on those experiencing food insecurity and the factors affecting this experience. In addition, it identifies gaps in food support provision and makes recommendations on how these gaps might be filled for a smoother and targeted food support distribution system.

In order to arrive at an understanding of food insecurity in the island nation, survey data was collected from four different geographical locations in Singapore in conjunction with semi-structured interviews with several food support organisations.

Despite Singapore being ranked by the Economist Intelligence Unit as the fourth most food-secure nation in the world, this study shows that food insecurity is prevalent in the study sample, with close to 19% of the 236 survey participants reporting severe food insecurity. Further, while lower income is typically positively correlated with the experience of food insecurity, this report finds that income is not the only factor in persistent food insecurity. Food insecurity is not limited to households belonging to the lowest income bracket, indicating that factors other than economic concerns precipitate the experience of household food insecurity. These other factors are time constraints, social isolation and health concerns.

The various food support organisations we interviewed have responded to household food insecurity in various ways. Besides providing food, some give households flexibility in buying their own food, ameliorate social isolation through communal meals, and link households with other forms of social and financial support. Nevertheless, further investigations revealed the extant gaps in service provision of food support. These gaps are lack of nutritious and quality

food, inefficient targeting of food-insecure households, and difficulty in addressing root causes of food insecurity.

Recommendations discussed in the report include the following:

Greater Coordination and Targeting of Food Support

This can be made possible via careful assessment of food needs among the target groups and matching the type of food support to specific characteristics of the target group, for example, dry rations for those who have the means to cook and cooked meals for those who do not.

Prioritising Nutritious and Quality Food

This can be facilitated through food organisations combining resources so that fresh nutritious food may be available to those in need.

Community-Based Solutions

This suggestion aims at tackling the problem of social isolation and people facing time constraints by bringing people together in community kitchens, cooking classes and community dining options.

Increasing Education

Education and raising awareness about food insecurity will help to prevent misconceptions and increase empathy for food-insecure individuals. This may contribute to creating a less stigmatised food support environment and generate support to tackle food insecurity in Singapore.

Overcoming Food Insecurity Through a Food Systems Approach

Viewing food insecurity as a "system" with multiple stakeholders and interrelated issues provides long-term holistic solutions to tackle it.

01

BACKGROUND



Singapore is a nation of food lovers, with food thought to be an important facet of Singaporeans' cultural identity.¹ The variety of food on offer reflects Singapore's diverse population, and eateries range from neighbourhood hawker centres to high-end Michelin-starred restaurants. Food is a vehicle to bring people together. It provides a sense of nostalgia—the taste of childhood and memories of roving hawkers across the city-state. It has an aspirational dimension as people seek to eat at the “best” locations across the island.² Food plays an integral part in the lives of Singaporeans.

Singapore ranks as the world's fourth most food-secure nation on the Global Food Security Index.³ This index considers the affordability, availability, and quality and safety of food supply. As a small island state, Singapore has limited land capacity to produce its own food. Through building a resilient food supply system, the nation as a whole has reached a state of good food security.⁴ Moreover, the presence of wet markets, local food stores and supermarkets means that fresh food is widely available across the nation. Add to these hawker centres, coffee shops and food courts where food is priced at a few dollars, and it is apparent that affordable cooked food can be conveniently found. Nevertheless, recent newspaper reports and articles have brought attention to the existence of food insecurity among certain sections of society and highlighted how the fancy cars and bright lights of the cosmopolitan city-state work well to hide this very pertinent issue.⁵

Food Insecurity in Singapore

The seeds of the current study were sown when the issue of food insecurity surfaced in a previous study aimed at measuring overall poverty in Singapore in 2013–14.⁶ Like poverty, food insecurity has been under-explored in Singapore, with no official definition or recognition of the issue. Nevertheless, various organisations and programmes provide food support in the country. One recent study by Tan et al. documented the lived experiences of food insecurity, shedding light on the poor health among low-income groups

Singapore ranks as the world's fourth most food-secure nation on the Global Food Security Index.

and debunking the multilayered approach in state welfare.⁷ It identified numerous gaps and inequities in the system from the perspective of the beneficiaries, that is, people who received food support.

This study builds on the previous study by taking a systemic approach. It examines household food insecurity in Singapore as experienced by those who encounter it as well as organisations providing food support to such individuals and families. It explores the experiences of both beneficiaries and service providers. Such an approach should help to bridge the gaps between food support organisations and their beneficiaries.

Specifically, this study provides insights into the following research questions:

1. Who among Singaporean citizens and PRs is experiencing food insecurity and why?
2. How are the existing food support systems meeting the needs of those living with food insecurity?
3. What are the gaps in service provision?

Food security is achieved “when all people, at all times, have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life”.⁸ In contrast, household food insecurity comes about when a household does not have,



or is not confident of having, “economic and physical access to sufficient, acceptable food for a healthy life”.⁹ Crucial to the definition is the uncertainty of food supply: food may be available to the household at a specific point in time, but the household’s uncertainty in sourcing adequate food tomorrow, in a week or in the coming month suggests food insecurity. Without access to adequate nutritious foods, households may also be food insecure even if they are hunger free.

While healthy food may be available across Singapore, the question is whether it is accessible to all. Food costs in Singapore are rising,¹⁰ squeezing household budgets. Moreover, from a financial perspective, food is a flexible item in a household’s budget “that can be cut when housing, fuel or debt repayments cannot be postponed”.¹¹ Hence, when households face financial difficulties with competing needs, their expenditure on food can be compromised.

Food insecurity arises also due to other non-economic concerns. For instance, in some households food may be available but not accessible due to a lack of resources (time,

equipment or ability to cook).¹² Moreover, the elderly and persons with disabilities and health conditions are more vulnerable to food insecurity due to their lower mobility, poor health, and lack of access to food and transportation.

Singapore’s Food Support Landscape

The growing presence of food support organisations and groups is testimony to the issue of household food insecurity in Singapore. For instance, there are about 125 such organisations and groups with an online presence as of the time of this writing. While there is no coordinated government approach to food support in Singapore, these organisations and groups provide such support. Food-specific organisations such as The Food Bank, Willing Hearts and Food from the Heart distribute food of different types to those in need. Religious organisations and community groups also provide food support. Moreover, organisations that work with low-income households and marginalised individuals across Singapore often have, as one of their many programmes, some kind of food support. This support takes the form of distribution of ration packs, cooked food,

Food costs in Singapore are rising, squeezing household budgets....when households face financial difficulties with competing needs, their expenditure on food can be compromised.

or vouchers/cash to purchase food. For example, the Agency for Integrated Care offers home delivery of cooked meals at a subsidised rate to those who are unable to shop and cook for themselves.

Through qualitative and quantitative research methodologies, this study is an exploratory attempt at understanding the issue of food insecurity in Singapore. Drawing on the findings, it provides suggestions for improvement in current support systems to aid long-term progress in tackling food insecurity.



M E T H O D O L O G Y



Data was gathered in two distinct phases for this research project:

1. Interviews with organisations or groups of volunteers providing food support to Singapore citizens and Permanent Residents (PRs) in Singapore
2. Survey of Singapore citizens and PRs which used a mix of qualitative and quantitative questions

The focus of the study is on Singapore citizens and PRs, particularly those eligible for support from social support mechanisms in the country.

Phase 1: Interviews with Food Support Organisations

Phase 1 aimed to establish food insecurity needs and support from the organisations' perspective. As there was no database on food support organisations in Singapore, an online search was first carried out to identify such organisations. Of the 125 food support organisations identified, around 50 provided support on a regular basis (at least once a month). While some organisations provide ad hoc food support, such as during festive periods (e.g., Deepavali and Lunar New Year), we focused only on those providing regular food support as they would have greater engagement with and knowledge of the individuals and households receiving support.

We contacted the organisations providing regular food support, and 35 organisations agreed to be interviewed. These 35 organisations are a good representation of the different food support organisations, but they do not constitute an exhaustive sample. Key individuals in each of these organisations connected with the food support initiatives were interviewed.

The interviews were semi-structured, and interviewees were asked questions regarding the mechanisms used to identify those in need, the types of support offered, the people targeted

and the extent of need. Semi-structured interviews allowed for a greater depth of discussion and understanding between interviewers and interviewees. The interviews were audio recorded and transcribed with the consent of interviewees.

Phase 2: Survey of Singaporeans and Permanent Residents

Following the interviews in Phase 1, a survey was carried out to assess the spectrum of food insecurity among Singaporeans and PRs in Singapore.

Survey Sample

The survey sought to get a sense of the different food insecurity situations experienced by Singaporeans and PRs. It did not aim to be a representative sample of the Singaporean and PR population.

Survey participants were recruited in two ways. A small number were recruited through working with an organisation interviewed in Phase 1 (the other organisations declined to provide this access). The remaining participants were recruited through door-knocking sessions at HDB flats in four geographical areas across Singapore. This sampling process was based on a few criteria:

- One geographical area each from the West, Central/South, East and North areas was chosen in order to get a regional spread of participants.
- The four areas were served by at least one food support organisation, such that food-insecure households would be among the sample.
- The areas comprised rental flats (usually one-room but also two-room) and non-rental flats (two-room and above). Phase 1 identified some food support organisations specifically targeting rental blocks, which are accessible only to low-income households with a total

monthly income of \$1,500 and below.¹³ Surveying non-rental blocks allowed data to be collected for those who were likely in a higher income bracket and less targeted by food support organisations.

The doors to all flats were knocked on, and the participants' consent was obtained before the survey was carried out. The surveys were conducted face-to-face by a trained student researcher, and all participants received a \$10 voucher as a token of appreciation for participation. A total of 236 usable surveys were collected.

Survey Tool

The methods for measuring household food insecurity are diverse. One approach seeks to quantify food consumption and nutrition, such as through measuring caloric adequacy through diet recall¹⁴ or nutrition measurements and blood tests.¹⁵ These methods are in-depth in identifying the state and extent of malnutrition but are also intensive and carried out over a long term. As this study aimed to uncover the nature and extent of food insecurity, we decided instead to look into the experience and perception of food insecurity.

The scales developed to measure the experience and severity of household food insecurity have questions ranging from anxiety and vulnerability about having adequate food, to adjustments and inadequacy of diet and finally reduced food intake.¹⁶ While each question gives an indication of the problems being faced, it is only when the scale is taken as a whole that the true severity of food insecurity is measured.¹⁷ Of the various scales available, we adopted the Food Insecurity Experience Scale (FIES) developed by the Food and Agriculture Organization (FAO) of the United Nations and validated for international use.¹⁸ FIES was chosen as it captures the severity of food insecurity at the household level through eight simple, straightforward questions requiring a "Yes", "No" or "Unsure" response. While it has some limitations—it relies on the participant's ability to recall situations over the last 12 months

and does not capture the number of occurrences or frequency of food insecurity situations experienced—it was nevertheless an effective tool to get a sense of food insecurity in Singapore.

The eight questions on the FIES are as follows:

- 01 During the last 12 months, was there a time when you or others in your household worried about not having enough food to eat because of a lack of money or other resources?
- 02 During the last 12 months, was there a time when you or others in your household were unable to eat healthy and nutritious food because of a lack of money or other resources?
- 03 During the last 12 months, was there a time when you or others in your household ate only a few kinds of foods because of a lack of money or other resources?
- 04 During the last 12 months, was there a time when you or others in your household had to skip a meal because there was not enough money or other resources to get food?
- 05 During the last 12 months, was there a time when you or others in your household ate less than you thought you should because of a lack of money or other resources?
- 06 During the last 12 months, was there a time when your household ran out of food because of a lack of money or other resources?
- 07 During the last 12 months, was there a time when you or others in your household were hungry but did not eat because there was not enough money or other resources?
- 08 During the last 12 months, was there a time when you or others in your household went without eating for a whole day because of a lack of money or other resources?

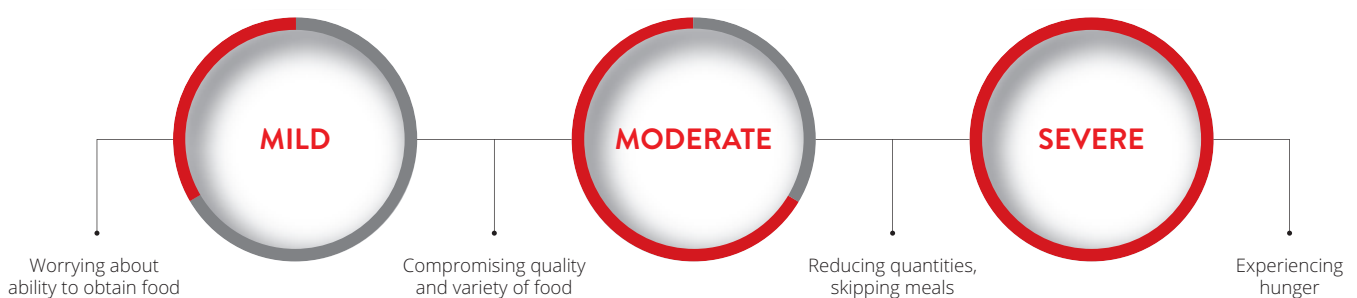


Fig. 2.1 Definitions of mild, moderate and severe food insecurity

Food Insecurity Level	Classification 1	Classification 2
Mild	“Yes” response(s) to questions 1, 2 or 3	“Yes” response(s) to 1 to 3 question(s)
Moderate	“Yes” response(s) to questions 4, 5 or 6	“Yes” responses to 4 to 6 questions
Severe	“Yes” response(s) to questions 7 or 8	“Yes” responses to 7 or 8 questions

Table 2.1 Classifications for defining food insecurity

These eight questions spanned a scale that included mild, moderate and severe food insecurity. Fig. 2.1 and table 2.1 show the definitions of mild, moderate and severe food insecurity, and how they correspond to the eight questions.

The first classification looks at the severity in terms of progression through food insecurity stages, from being worried about the ability to obtain food (mild food insecurity) to experiencing hunger (severe food insecurity). The second classification determines severity based on the number of scenarios experienced. Using the second classification and allocating 1 point to each question answered “Yes” allows for a derivation of the overall food insecurity score for each household.

The FAO FIES measures food insecurity due to a lack of money or resources. However, interviews in Phase 1 revealed that money was not the sole reason why individuals and households needed food support. Poor health and a lack of time, mobility and household cooking facilities were also reasons. To understand causes for household food insecurity beyond financial reasons, four further questions were added to the scale:

Other than money, in the last 12 months have any of the following reasons meant that your household did not always get enough to eat:

- 01 Not enough time for shopping or cooking?
- 02 Illness or health problem that made it too hard to buy food?
- 03 Lack of cooking equipment such as a stove, gas, pots and pans?
- 04 Illness or health problem that prevented you from eating?

Calculations of both the eight-point scale and the additional four questions were made independently of each other as well as combined to understand the level and type of food insecurity—whether financial, health, equipment or time related. This allowed for identifying the extent and type(s) of food insecurity experienced by households.

Finally, demographic questions (e.g., income, household type, size) and additional questions on the type and frequency of food support received (if any) were included in the survey.



03

ANALYSIS OF FINDINGS



This section provides an analysis of the major findings from the survey results as well as the qualitative interviews. Three major themes surfaced and are discussed in turn:

1. Who experiences household food insecurity and why?
2. How are the existing food support systems meeting the needs of those living with food insecurity?
3. What are the gaps in service provision?

Who Experiences Household Food Insecurity

Prior to addressing the question of who experiences food insecurity in Singapore, it was imperative to understand the extent and severity of the problem. The survey results provided an overview of the extent and severity of household food insecurity in Singapore. As shown in fig. 3.1, based on the first classification, which measures insecurity as a progression, a substantial percentage of the sample experienced moderate to severe food insecurity. Although the sample is not representative of the entire food-insecure population in Singapore, this subset provides an indication of the potential household food insecurity in the country.

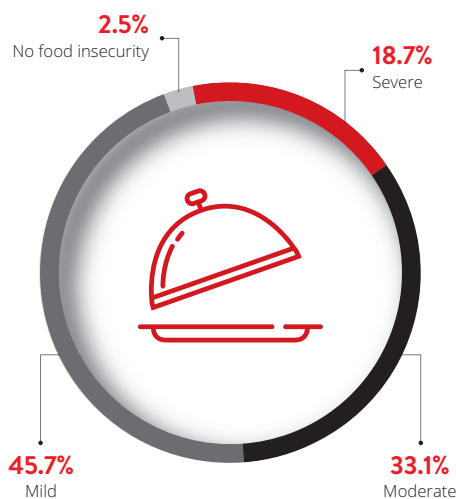


Fig. 3.1 Distribution of levels of food insecurity in the study sample.

A particularly useful insight yielded by the survey results is that food insecurity is not limited to households that fall into the lower income bracket. In fact, 27% of the participant sample had an average monthly income of \$2,000 and above (fig. 3.2). This finding suggests that food insecurity is not an outcome of financial constraints alone. Other factors seem to contribute to its existence and perpetuation in Singapore.

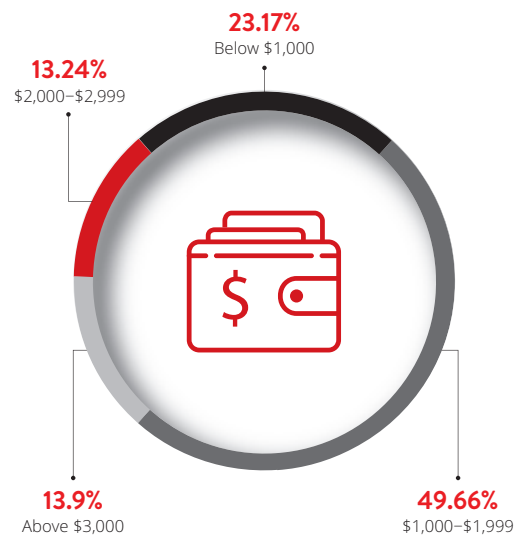


Fig. 3.2 Distribution of household food insecurity by income

However, a closer inspection of the family configuration data revealed that there was a significant positive correlation between size of family and food insecurity ($r = .14, p < .05$): as family size increased, so did food insecurity. More than 50% of moderately to severely food insecure individuals belonged to families headed by single/divorced/widowed parents, indicating higher vulnerability for food insecurity in these units. With respect to age, it was noted that there was no significant difference between the mean food insecurity reported by younger (below 50 years, $M = 2.34, SD = 2.59$) and older (above 50 years, $M = 2.47, SD = 2.90$) participants ($t = 0.35, p > .01$). However, older participants did report more health ($t = 2.24, p < .05$) constraints as compared to younger participants.

Factors Contributing to Household Food Insecurity

While the survey results shed light on the demographics of those experiencing household food insecurity, the qualitative findings highlight some of the possible reasons for the problem. Broadly, these factors fall under three main categories: income, health constraints and time constraints.

Income

The single most recurrent theme that surfaced about the potential reasons behind food insecurity centred on financial concerns. Interviewees from social service organisations (SSOs) reported several factors that may explain why households struggle with finances, with certain households battling a combination of factors:

- Elderly with a lack of savings to support themselves and lack of family/family support
- Single-parent families (including those single due to incarceration)
- Illness or job loss of main breadwinner
- Low-paid employment
- Poor job prospects due to ex-convict status
- Issues with personal financial management
- Unable to work due to looking after young children
- Large family size

Income level is also most commonly used as a tool to identify individuals or households in need of food support. This is done through formal and informal channels. Formal channels include assessing household income data. However, organisations did not have the same income eligibility criteria: the lowest per capita income cut-off was \$400 and the highest \$750. Other organisations relied on information provided by community workers to select their beneficiaries:

"We're not actually doing the process of selection. We're relying on the staff from [the local Senior Activity Centre] who actually are gauging who are the most needy families. So constantly, we depend on them."

– Representative from a non-profit organisation

Informal channels include simply judging whether an individual or family seems to be in need or using housing type as a proxy for income level. In particular, three organisations targeted one-room rental flats as households living there had to have a monthly income of no more than \$1,500:

"So generally we started with the one-room rental flats. We have seven blocks around this stretch. And along the way, I think some of the residents from the other three-room, four-room [flats] joined us through word of mouth, through friends and all that. We don't turn them away; I always say 'don't give us trouble'."

– Representative from a religious organisation

"The criteria for joining is all one-room rental flats, but ever since January this year, I kind of allow more to come in who are from the four-room purchased flats. Because they're old, elderly, and some of them are just in the house for the whole day and they don't come out as well."

– Representative from a volunteer group

"I think not just financial, but we also try to have other criteria like if they are single parents, if they have children, more than two children that are aged below five; or they have elderly who are aged at least 65, they have the medical conditions that doesn't allow them to work; or mental health or disability. So, for those [cases] we actually give [them] specifically to the Family Service Centres. Because most of the families in the Family Service Centres, they're already receiving some kind of help. We don't want to replicate services, so we tell them that these are our criteria. And then if they meet the criteria, they will refer over."

– Representative from an SSO

It is apparent from the above that income level is an indicator and a condition for food support eligibility in Singapore. Nevertheless, the findings suggest that other potential factors predispose individuals to experience food insecurity. Next, we examine how health concerns and social isolation act as antecedents of household food insecurity.

Health Concerns and Attendant Social Isolation

Ill health, immobility and frailty are possible key reasons for food insecurity, mainly amongst the elderly in Singapore. A substantial proportion of the participant sample who reported having chronic health conditions (57%) fell into the moderately to severely food insecure bracket. Further, the food insecurity experienced by those with chronic health conditions such as diabetes and heart conditions was higher ($M = 3.27$, $SD = 2.91$) than that experienced by those without these conditions ($M = 1.92$, $SD = 2.29$, $t = 2.54$, $p < .05$). Although poor health is

often regarded as an effect of food insecurity, findings from the qualitative interviews suggest that it may also act as a precursor to rising food insecurity:

"I would say 50% are too frail to go out and get food. Because they need to go all the way down and walk to the market."

– Representative from a volunteer group

"Most of them can't work because they are on wheelchairs, and they are just frail... We've quite a number of them who are stroke-recovered patients, recovering or they're recovered but they can't really work anymore."

– Representative from an SSO

"I think mainly elderly who [are] staying alone: the couple staying alone, the son not staying with them. And then [they are] on wheelchairs so they actually cannot [come] down and purchase heavy stuff. Then we will deliver [food] to their doorstep."

– Representative from a community centre

The health conditions of beneficiaries—particularly the elderly—reduce their mobility and ability to access food, hence increasing their vulnerability to becoming food insecure.

Accompanying health concerns, there seems to be an inevitable lack of social interaction and bonding among the food insecure in Singapore, especially the elderly. Interlocutors from food support organisations reiterated the need for social belongingness. This highlights social isolation as a related need accompanying food insecurity:

"I'm told that with the elderly, they have a lot of food rations at home. They are not looking for any more food donations but they are looking for company. They are lonely."

– Representative from an SSO

Time Constraints

One of the four additional survey questions asked whether, during the past 12 months, households had not got enough to eat due to insufficient time for shopping and cooking.¹⁹ Survey results revealed that 26% of the severely food insecure did not get enough to eat due to insufficient time for shopping

Although poor health is often regarded as an effect of food insecurity, findings from the qualitative interviews suggest that it may also act as a precursor to rising food insecurity.

or cooking. This clearly demonstrates the time pressures on certain households and their subsequent struggles to provide food. Still, the data show that these households also experienced some issues due to finances.

Correlation tests were used to explore variables that may be linked to having enough time for shopping and/or cooking. Time affected one-fifth of survey participants. The primary factor correlated with having insufficient time for shopping and cooking was age ($r = -.31, p < .01$); those reporting not having sufficient time for shopping and cooking were more likely to fall into younger age brackets (fig. 3.3). When controlling for variables including type of employment, household income, education level, marital status and household size, age still had a statistically significant effect on having the time for shopping and cooking.

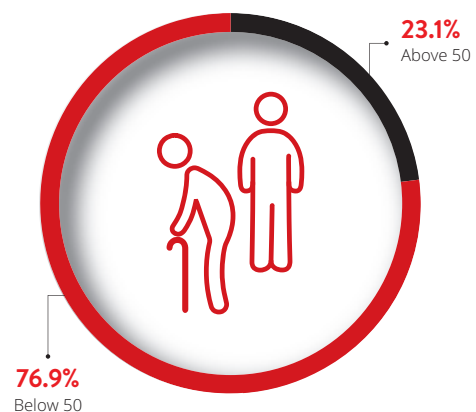


Fig. 3.3 Food insecurity experienced due to time constraints by age

Similar trends have been reported in previous research. A UK study identified a decline in cooking skills in younger generations and a growing requirement to work longer hours.²⁰ Although we were unable to verify this in our survey, if the same is applicable to Singapore, those of a younger age may be lacking time to cook due to greater working-hour commitments.

It is clear that a full picture of the trigger and coping mechanisms for time constraints is not available from the dataset. To fully understand this element it is necessary to dive deeper into the lives of those unable to shop and cook due to time constraints; this would help to further explore the reasons why those with otherwise the same characteristics, but of differing ages, are affected differently.

In light of these multiple factors affecting food insecurity, it is clear that there is no one approach to tackling the issue. For example, individuals facing time constraints would not benefit from receiving supermarket vouchers as they would not have the time to use these. The next section looks at the various forms of food support provided in Singapore.

Needs Met by the Existing Food Support Systems in Singapore

The interviews and surveys revealed the food support landscape in Singapore from the perspectives of the food support organisations and beneficiaries. This section details the forms of food support given and the ways in which they address food insecurity.

Food Provision

The 35 food support organisations interviewed showed a spectrum of the regular food support available across Singapore. Table 3.1 shows the different types of food support. While some organisations provided only one kind of support, others gave a variety of support depending on the needs of their beneficiaries.

Food ration packs were the most common form of food support provided. Together with supermarket vouchers or cash, they allowed households a less-perishable and longer-term form of food support. In contrast, cooked meals for home and communal eating were an immediate and perishable food source that households or beneficiaries could also obtain.

The organisations identified the elderly population as a particularly vulnerable group. Low-income elderly face mobility and functional constraints on top of financial constraints.²¹ As such, cooked meals delivered to homes are intended to provide a balanced diet for the low-income elderly who face difficulties in cooking or buying their own food. Cooked meals also benefit individuals facing time constraints, enabling them to eat well even without the time for shopping and cooking.





Type of Food Support	Food Ration Packs	Cooked Meals at Home	Cooked Meals for Communal Eating	Supermarket Vouchers/Cash
 <p>What is provided</p>	Mainly basic, non-perishable food (e.g., rice, cooking oil, biscuits). Some packs include fresh food (e.g., bread, vegetables, eggs)	Cooked food packet meals (e.g., rice with vegetable and meat dishes)	Cooked meals	Money or supermarket (usually NTUC) vouchers
 <p>Frequency of provision</p>	Usually once a month	Varies from daily to fortnightly	Daily or during weekly/monthly communal events	Usually monthly or ad hoc
 <p>Mode of support</p>	Delivered to homes	Delivered to homes	Provided in a community setting (e.g., community centre, residential void deck)	Delivered to homes or distributed to volunteers who buy food for or with the households
 <p>Other information</p>	Some organisations provide customised packs based on households' requests. Others also include essential household items like diapers	Mainly targeting the low-income elderly	Mainly targeting the low-income elderly	Some organisations issue supermarket vouchers that prohibit the purchase of alcohol or cigarettes

Table 3.1 Food support provision in Singapore

To limit potential abuse, some organisations distribute supermarket vouchers that are not valid for alcohol and cigarettes, or match volunteers to shop together with beneficiaries.

The food support organisations noted that cooked meals were well received by beneficiaries. However, a number of times during the interviews they raised questions about the quality of the food by the time it reached the beneficiaries' homes, as well as the nutritional content and suitability of the food (e.g., whether it catered to their taste and preferences). This will be elaborated on in the next section on gaps in service provision.

Enabling Choice and Autonomy

While most organisations provide standard food ration packs, a small number of them are able to personalise the ration packs or provide some specific items upon request. One organisation provides beneficiaries with a monthly list and cost of available items and allows them to select items within their allocated budget:

"[We are okay with the items selected] as long as it hits \$100 or it hits \$50, because [the beneficiaries] can't be taking cooking oil every month, right?...We feel that they should be able to have some choices. So that is the area that we want to focus on."

– Representative from an SSO

Having a selection of food items and toiletries available allows beneficiaries to select exactly what they require and reduce wastage or the delivery of extraneous items. It more efficiently matches food support to household needs without requiring significantly more work for the organisations.

Organisations providing supermarket vouchers or cash also prioritise giving choice and autonomy to beneficiaries:

"We want to encourage them to buy nutritious food, fresh food. So that's the main reason why we give vouchers. Also, we do see that there are some organisations that tell us that, sometimes [when] they give [food rations], the beneficiaries don't want the items. So what they do end up [with], they sell away or they give it to other people. It defeats the purpose. They do feedback to the organisations, [and after] some research, we feel that vouchers [are] more needed."

– Representative from an SSO

Recognising that beneficiaries may already be receiving ration packs with non-perishable food items from other organisations, some organisations provide vouchers for beneficiaries to purchase fresh food or top up what they already have. To limit potential abuse, some organisations distribute supermarket vouchers that are not valid for alcohol and cigarettes, or match volunteers to shop together with beneficiaries. While organisations can never fully control what the beneficiaries will purchase, they still prefer to give out vouchers and cash so beneficiaries can meet their own needs.

Ameliorating Social Isolation

Beyond nutrition and sustenance, food support can also have social and emotional benefits. Food support organisations providing cooked meals for communal eating aim to bring together the community through food. In particular, social and community organisations hold weekly or monthly food gatherings in residential community settings such as the community centre, car park or void deck. The elderly are a key target group. Those who live alone are particularly vulnerable

The organisations providing supermarket vouchers pair beneficiaries with volunteers to encourage befriending and add a human touch to food support.

to social isolation, lacking the motivation to cook with no one to share meals.²² The sample characteristics show that 65% of the one-member households were above 50 years old. This suggests the possibility that a greater percentage of socially isolated individuals are from the older age group.

Through food support gatherings, residents get to interact with and know their neighbours over a meal. Communal food support appears to be an ideal way to bring together those who are socially isolated, but it also requires people to be willing to step forward and come out to join others:

"Why I included the four-room and five-room flat is because I read this report by [the National University of Singapore] published in December [2016]. The highest suicide rate in Singapore is actually the elderly, and that really hit me. And so I said, let's invite the rest as well and see [how] we can create a nicer community for them [to] come down and chit chat."

– Representative from a volunteer group

On occasion, organisations bring in the neighbourhood Family Service Centre to connect with residents and share support services that are available to residents. These food gatherings hence also become a platform to connect vulnerable residents to community services.

On the other hand, the organisations interviewed that served cooked food daily were religious organisations. Food was part of the religious community, and people would come to participate in prayers or other religious activities before eating. While the organisations were aware that certain individuals attended due to their need for a daily meal, they did not specifically target these individuals. One religious organisation had a specific system for those who needed food but could not give a monetary donation to the organisation. These

individuals could complete certain tasks around the temple (such as sweeping and other chores) in return for a nutritious, hot meal:

"[We] cook hot soup, rice, vegetable dish, a meat dish, and a dessert. Because a lot of [the individuals who come for a meal] don't cook, hot soup is welcomed by them. A lot of them don't eat fruits, that's why we give them fruits—and vegetables and meat because when you're living alone, it's difficult to cook."

– Representative from a religious organisation

Whether targeting a geographical, elderly or religious community, one common feature of religious organisations is the provision of food support without singling out those "in need" and therefore eligible for support. People can receive immediate food support and be "like everyone else"²³ without facing the emotional stigma of applying for or receiving food aid.²⁴ Communal food support is also a way to bring together those who are socially isolated and can aid in the creation of communities who look out for one another.

Addressing Poverty

Because food insecurity is often part of a larger, multifaceted problem of poverty, some food support organisations do not stop at just providing food support. While some organisations use their communal food gatherings to connect residents to Family Service Centres, others directly refer their beneficiaries to social support organisations which can provide further, more targeted support in key areas of need.

Organisations also combine food support with social support. The organisations providing supermarket vouchers pair beneficiaries with volunteers to encourage befriending and add a human touch to food support. Some volunteers meet and shop together with the beneficiaries, while others shop for the beneficiaries after finding out what they need. They hope that befriending can raise aspirations and motivate beneficiaries to take opportunities to further themselves:

"So I think we need to have the human touch, to go down, to deliver the food as well as really to be an encouragement, to speak life to the people. Sometimes, it's just a change of mindsets of people who are in need. Sometimes, people just need to hear, to break out of their old mindsets and then to have a breakthrough in their own lives."

– Representative from a non-profit organisation

The intention to motivate and help beneficiaries overcome long-term financial and health issues was echoed by other organisations:

"We need to encourage them, motivate them. They need motivation. Because most of these families, they have low self-esteem, so we need to encourage them. That's why we have classes for them, motivation[al] talk[s], seminars, all that, just to tell them that out there, there are many opportunities and give them reminders [that] opportunities only come once."

– Representative from an SSO

"We have the luxury of eating proper food, but [beneficiaries] do not have it. So some of them, like I've told you, they are receiving [food support] for ten years. As you can see, the nutrition[al] value of food is not there. I guess one thing is to be able to get more funding or donors to be able to really start on this health improvement programme so that we can provide our clients with better and more nutritious food."

– Representative from an SSO

Some organisations supplement food support with financial management and budgeting support to help beneficiaries improve their financial situation. A few organisations add on cooking classes to teach people how to cook a healthy, nutritious meal on a tight budget. Other organisations focus on providing tuition to the children of families receiving food support. These sessions serve not only to improve the children's educational achievement but also to help them aspire to move out of what could be a vicious cycle of poverty.

Challenges and Gaps in Service Provision

Despite efforts by food support organisations to address food insecurity, there remain several challenges and gaps.

Lack of Quality and Nutritious Food

A number of organisations suggested that they would like to improve the nutritional quality of their food support. They acknowledged that generic food ration packs and some meal packets could be cold on delivery, monotonous, and lacking in quality and nutrients:

"I'm not too much in favour of food like that. [There] are organisations who give free food, but then you won't eat it yourself: gravy spilling out, the vegetables all yellow and things like that. If you want to give, give something decent... I am not asking for nice bento sets, but [to] pack it nicely. You're feeding another human being. Sometimes, the food is so bad. Sometimes, [the beneficiaries say] 'no choice, no choice'. They always tell themselves 'no choice, no choice, just eat.'"

– Representative from a volunteer group



Many of the food support organisations themselves rely on donated food items and prepared food. While they wish to obtain fresh and healthier food for their beneficiaries, the quality of their food support is dependent on what they receive. Organisations face a constant challenge in finding food and monetary donors who can support their cause. Moreover, providing nutritious, particularly fresh, food is difficult due to storage and transportation issues. Food provision and alleviating hunger are thus prioritised over quality and nutritious food, and beneficiaries have “no choice” but to eat what they are given. As a volunteer group representative summarised, “feeding your stomachs [comes] first before anything else.”

Nevertheless, food security is not just about having sufficient food but also having “nutritionally adequate” food.²⁵ The elderly are already a vulnerable group in terms of their nutritional intake. Out of the age groups surveyed in the 2010 National Nutrition Survey, those aged 60–69 years had the lowest consumption of vegetables (only 23.7% of them met the guideline) as well as meat, eggs and soy products (less than half met the guideline).²⁶ A research study in 2014 found that the elderly living in one- and two-room flats had a higher risk of malnutrition.²⁷ Without a change to improve the nutritional quality of food provided, it is likely that negative health effects will be exacerbated, particularly among elderly beneficiaries.

Inefficiencies in the Food Support System

As mentioned above, the food support organisations interviewed did not have the same method of identifying households or beneficiaries. While many used formal channels such as assessing household income eligibility, the income threshold varied with organisations. Moreover, organisations also used informal assessment methods, as well as take-in referrals and walk-in cases.

Rental flats (mostly one-room but also two-room) were a particular proxy indicator of need for some organisations, as they were available only to low-income households. This corroborated the survey findings, where 70.3% of those receiving any form of food support were from rental one-room HDB flats. However, examining the distribution of food insecurity by housing type (fig. 3.4) revealed that while the largest proportion of participants (39.2%) experiencing food insecurity lived in one-room flats, a good 36.6% of them lived in three-room flats. A further breakdown of this data showed that 30.1% of the three-room-flat households experienced moderate to severe food insecurity, a sizeable amount compared to 63.7% of the one-room-flat households.

Targeting food support through informal channels and proxy methods hence raises the concern of whether food support is reaching those who most need it, that is, the severely food insecure. This stark inefficiency is evident from the fact that as many as 10 (22.2%) of the 45 severely food insecure households received no food support at all. Further, the survey results revealed that only 12 (27%) of the 45 severely food insecure households received daily cooked meals (refer to the middle bar in fig. 3.5). Fig. 3.5 illustrates this untargeted provision of food aid. It is clear that the current food distribution system lacks efficiency and should be reorganised to target other needy households that are without support.

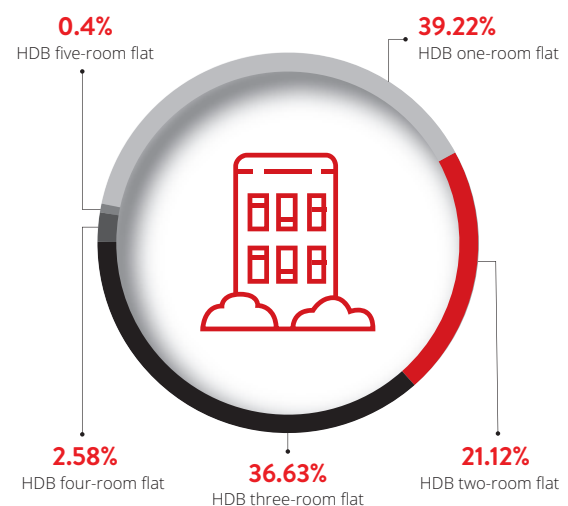


Fig. 3.4 Distribution of household food insecurity by household type

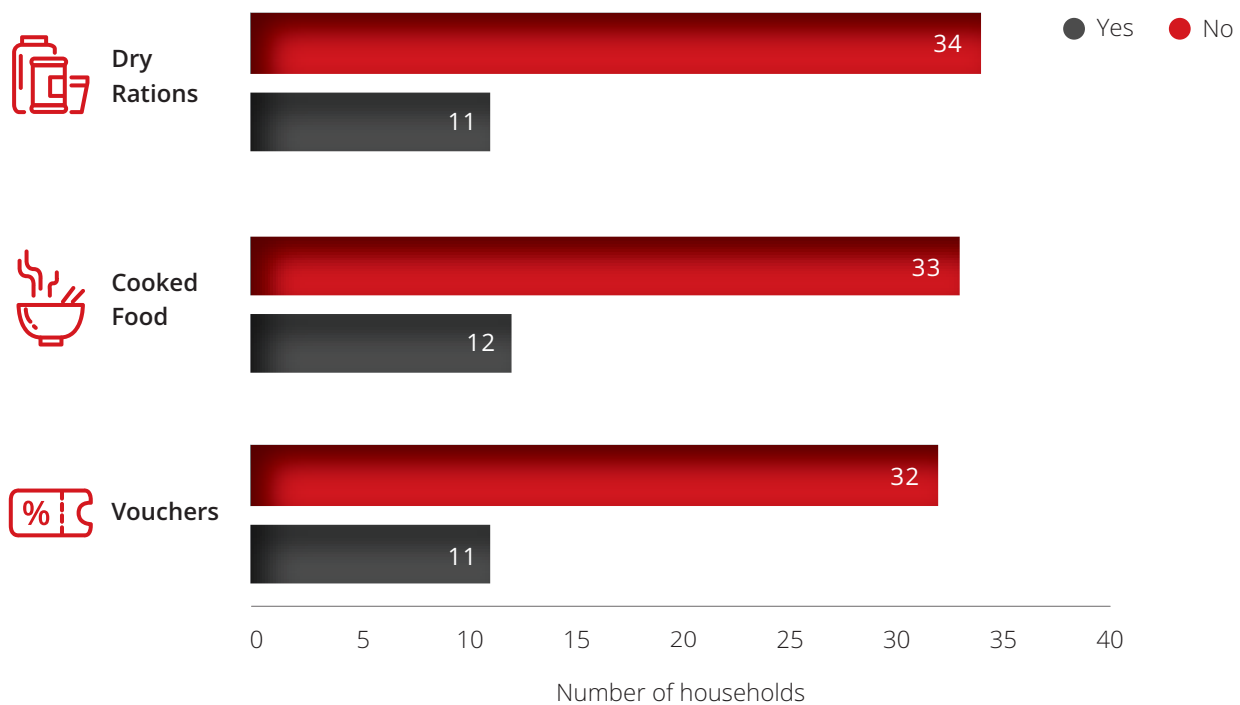


Fig. 3.5 Severely food insecure households receiving food support

A related problem that results from the fragmented targeting of food organisations is duplication in food support. While the organisations interviewed reached an estimated 7,000 households, these were not unique households, as some received support from more than one organisation. Moreover, organisations targeting rental blocks were in essence targeting a geographical group regardless of current support or level of need. The duplication of food support becomes apparent during festivals such as Chinese New Year or Christmas, when organisations conduct annual food drives. Households in targeted areas end up getting more food support than needed:

“During Chinese New Year, we slow down a lot, because [the beneficiaries get] a lot of hampers which give them crazy food. So their houses are like supermarkets: 2.5 kilos of rice...3.5kg mee hoon, canned food all around their house.”

– Representative from a volunteer group

At the same time, the difficulty faced by organisations in targeting households in need is exacerbated by the emotional and social stigma associated with seeking support:

“I think a lot of them are very quiet about their situation. They don't want people to know that they are in need of help.”

– Representative from an SSO

“We do have families that do not come forward. They don't approach the MP [Member of Parliament]. Why people/ the elderly go and pick up the carton boxes [is] because they don't want handouts. They still want to do it on their own. So we do have that as well. Having said that, we are not saying that those who come have no pride. They really need help. Those who really don't come forward, there is no way that we will know. [They] have to come forward to help [themselves] first, otherwise we really cannot help. There are some families or individuals that are a little bit shy to come forward, and in fact, when I talked to some of my Taiwan counterparts, they have the same problem also.”

– Representative from a non-profit organisation

For households who receive support due to their financial situation, the food provided helps them manage their other financial pressures rather than feed them for months on end.

As the organisations highlighted, food-insecure individuals and households may not reach out for help until they have no choice. While this study did not delve into the stigma of seeking and receiving food support, various studies have identified some key concerns. Food-insecure individuals may see food aid as stigmatised and be ashamed to ask for it.²⁸ They are also concerned that people see food support recipients as poor, lazy and socially weak. Receiving poor-quality or near-expiry food donations can also diminish the recipients' sense of self-worth.²⁹ Organisations need to address these negative perceptions of receiving food support in order to make such support more accessible to those in need.

Difficulty in Addressing Root Causes

Finally, organisations acknowledged the short-term/temporary nature of food support. For households who receive support due to their financial situation, the food provided helps them manage their other financial pressures rather than feed them for months on end:

"It's a top up because the family would have some form of resources, especially those that are short term. For example, if one of them is being incarcerated, he is in jail or something, but they will still be having income along the way from the mother but maybe the money that they have can be spent for education, it can be spent on other things and the food will kind of help to offset. It's more of an offset for something else."

– Representative from an SSO

"So our food is barely enough, it's basically just to help them to lighten their financial burden. The amount that they save on this food that we give, hopefully they can use the money for some other more pressing needs. Like utilities, medical, school fees and so forth."

– Representative from a non-profit organisation



Food support is seen as a temporary mechanism to offset or lighten households' financial burden rather than improve their financial situation. Looking at the frequency of food aid provided to those surveyed provides an insight as to why this aid would be unlikely to solve household food insecurity. Fig. 3.6 illustrates the frequency of food rations received by severely food insecure individuals and is evidence that the majority of such individuals receive no or infrequent food support.

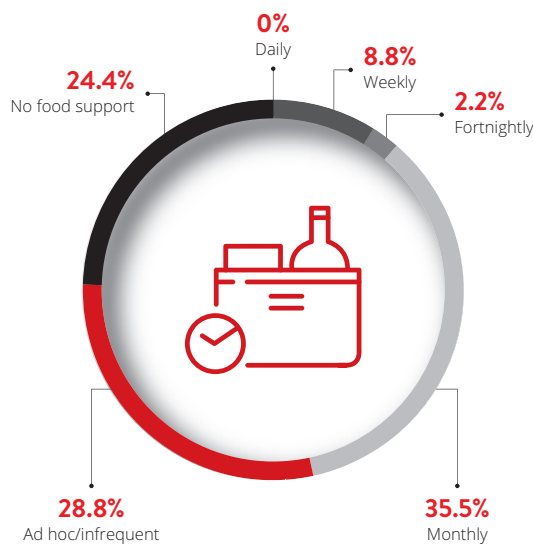


Fig. 3.6 Frequency of food support received by severely food insecure households

For instance, among the respondents who received dry rations, 44% received them monthly and 46% received them on an ad hoc or infrequent basis. Similarly, of the 43 respondents who received cooked food, 28% received it daily and 40% received it on an ad hoc or infrequent basis. Finally, of the 62 respondents who received NTUC vouchers, 85% received them on an ad hoc or infrequent basis.

These findings corroborate studies in other countries showing that temporary food aid alone may ease the immediate situation but does not create greater household food security.³⁰ Food aid may provide needed but short-term sustenance for those actually going without meals. However, food support alone is unlikely to solve food insecurity, as there will still be concerns once the dry rations, cooked meals or vouchers have been exhausted.

Instead of food support alone, those experiencing food insecurity due to financial constraints need to improve their overall material and financial resources.³¹ As mentioned in the previous section, some organisations provide other forms of support. These include befriending, providing referrals to other social support organisations, and holding upskilling, financial management and motivation workshops. Such holistic and longer-term support is more useful in generating change and moving households out of food insecurity, but it needs to be scaled up and provided across the spectrum of food-insecure households in Singapore.



04

REFLECTIONS AND RECOMMENDATIONS



As the first major study of food insecurity in Singapore, this study has sought to give an understanding of the issue, the types of people who are food insecure, the existing landscape of food support, and gaps in food support delivery. Three key gaps in service provision have been identified:

1. A lack of nutritious and quality food,
2. The inefficient targeting of food-insecure households, and
3. A difficulty in addressing root causes of food insecurity.

These gaps reveal misalignments with the food insecurity need and service provision. This section thus provides recommendations aimed at the system as a whole rather than individual food support organisations.

Greater Coordination and Targeting of Food Support

To more effectively support food-insecure households and individuals, food support organisations should ensure they focus on a target population and understand their needs. This can be a geographical population (e.g., a particular neighbourhood) or a targeted need (e.g., health-related food insecurity). The factors affecting food insecurity identified in this study can serve as a guide. Organisations should also conduct needs assessments and have clear eligibility criteria. This would ensure that the right type of support reaches the right people. For example, ration packs should be given to those with the means or health to cook, and vouchers should be given to those who have the mobility to purchase food.

On a national level, the food support ecosystem can benefit from better coordination and consolidation. The wide range of food support organisations—informal community groups, formal organisations, organisations providing food as their primary or secondary aim—provide many challenges and opportunities for this. Coordination and consolidation can take several forms:

1. A collective network where food organisations can share information and pool resources on needs assessments, households reached, fundraising for food and monetary donations, food distribution, and volunteer mobilisation.
2. An open mapping of food support provision across food support organisations to highlight “over-served” areas and areas of need.
3. Assessment tools that can be easily utilised by organisations to understand the needs of households and better target support.

Prioritising Nutritious and Quality Food

Besides providing sufficient food, organisations should prioritise the nutritional value of the food. This means providing fresh food in ration packs, and balanced cooked meals. Supplying fresh food may be challenging due to storage issues and high perishability. However, if food organisations combine resources, as suggested earlier, operations can be coordinated through a central location.

Fresh food must be targeted to those who have the facilities and ability to cook it. It may therefore need to be paired with cooking supplies such as a stove or gas. While this involves an increased expense, the long-term benefits of nutrition and health to beneficiaries should take precedence. Food organisations can also pool resources and partner with other organisations to deliver these services.

Providing food that meets general quality standards respects the dignity of those receiving food support. For example, the staff of one organisation we interviewed would try out the lunch packs to ensure that the food was of good quality. The same is applicable to organisations distributing food ration packs: they should provide food items that form a balanced meal rather than just snacks and drinks. Personalised ration packs are a good example. The basic need is for food support

Communal dining can reach out to socially isolated individuals or those facing time constraints, allowing them to share food without facing the emotional stigma of applying for support.



organisations to appreciate and cater to various needs and differences. While this takes greater effort, it will help to alleviate the emotional strain and stigma faced by food-insecure individuals.

Community-Based Food Support

Having community-based food support will help tackle the multiple food insecurity challenges of social isolation, stigma and inadequate food. There are already a few community kitchens in Singapore (e.g., GoodLife! Makan by Montfort Care) where community members come together to prepare and cook meals. Religious organisations providing hot meals to those who participate in their activities are another example. Communal dining can reach out to socially isolated individuals or those facing time constraints, allowing them to share food without facing the emotional stigma of applying for support. Moreover, having kitchens in communities across Singapore will ensure that packed, cooked food is still warm when it reaches recipients.

Vulnerable groups such as elderly residents or single mothers (if childcare is provided) can run community kitchens and draw a small income. These shared spaces can also be used for cooking classes provided by community members. Such spaces can therefore open many opportunities to bring the community together through food. Beyond community kitchens, social supermarkets (where surplus products and foods near their best-before date are priced significantly lower), food-sharing schemes and other innovative community-based solutions can be explored.

These community-based food initiatives can take various forms: whether formally managed by organisations, informally developed by volunteers, or as social enterprises. They can also be paired with food donations from restaurants, hotels and supermarkets, thus tackling both food waste and food insecurity. Community kitchens would need careful management to accommodate differing needs, including hygienic spaces for halal food storage, preparation and cooking.

Increasing Education

While Singapore does not have a poverty index, relative poverty nonetheless exists. Despite the wide availability of food, food insecurity is a concern, as highlighted through this report. To materially support those who are experiencing food insecurity, it is necessary to change the perception of need in Singapore. Education and raising awareness about these issues will help to prevent misconceptions on food insecurity and increase empathy for food-insecure individuals and households. In the long term, education may contribute to creating a less stigmatised food support environment and generate more support to tackle food insecurity in Singapore.

Education can also take the form of further research and information sharing on food insecurity in Singapore. Building on this report, more research can be done to identify groups vulnerable to food insecurity. A representative survey of the population can be carried out, as well as studies to understand differences within vulnerable groups so that appropriate support can be provided. Studies can also evaluate the impact of food support across organisations and identify necessary improvements. For the development of suitable food support mechanisms, such a measure would be particularly useful.



Overcoming Food Insecurity Through a Food Systems Approach

Finally, because food insecurity is multifaceted, it is important to take a food systems approach to tackle the issue. This approach looks at food insecurity as a system with multiple stakeholders and interrelated issues. As highlighted in this report, food support alone can provide only short-term relief. To overcome food insecurity, a household must have sufficient income and manageable debt; be physically, mentally and emotionally able; have cookery, nutrition and budgeting skills; have healthy food available and accessible; have access to cooking facilities and utensils; and have time to cook.³²

To tackle food insecurity more systemically, food support organisations can link up closely with social service organisations providing other means of support. These organisations can provide further help and support to lift households out of food insecurity. This can include financial management workshops, employment support, access to health subsidies, tuition for children, enrichment and aspiration building for adults and children, and the like. Having such partners will also allow food support organisations to focus on expanding their outreach and provision for greater impact. While such an approach takes time, it provides focus for the long-term and holistic solutions required to tackle food insecurity.

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The mention of Singapore often conjures up images of a food lover's nation with easy access to abundant and delicious food of all types. However, the underbelly of the Singapore that most people see, with its Michelin-starred restaurants and air-conditioned malls, contains a different story: food insecurity is an unfortunate fact of life for several families in the city-state.

Hunger in a Food Lover's Paradise is the first examination of food insecurity in Singapore from the perspectives of households as well as food support organisations. Through interviews and surveys, this report reveals the various factors contributing to food insecurity as well as the efforts made by organisations to provide relief through financial and other means. The report also contains recommendations for food support organisations and other stakeholders to jointly address the challenges and gaps in Singapore's food support landscape.

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