Food Security and Dietary Diversity among Kerala's Low-Skilled Migrant Workers in the Gulf Cooperation Council Countries during COVID-19

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Abstract

This paper examines food security and dietary diversity among low-skilled migrant workers from Kerala, India, who worked in the Gulf Cooperation Council (GCC) countries and returned during the COVID-19 pandemic. Data was gathered through face-to-face surveys with 100 return migrants in key sending districts of Kerala during 2022 and 2023. Our research investigates whether these migrants experienced poorer diets and lower dietary diversity in their destination countries compared to those in Kerala, and whether broader shocks, such as the COVID-19 pandemic, affected their food security. The significant economic impacts of the COVID-19 pandemic disrupted the stability of food supplies for vulnerable groups, such as low-skilled migrants. It also considerably limited their access to adequate food in the GCC region. The findings reveal that nearly a quarter of respondents faced severe food insecurity during the pandemic in their destination settings. Their dietary diversity also declined during this period, as migrants faced major socioeconomic shocks, with many being forced to return to Kerala. Diaspora networks and informal support systems played a crucial role in helping migrants manage these vulnerabilities and maintain access to food amid the pandemic. However, dietary diversity improved after their return to Kerala, surpassing levels seen during periods of food security at the destination. The study highlights the urgent need to establish support systems that safeguard the rights of low-skilled migrant workers and ensure their social protection in the receiving countries.

Keywords

Kerala-Gulf migration corridor, return migrants, low-skilled migrant workers, food security, dietary diversity, COVID-19, pandemic shocks

Suggested Citation

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Cover Image

Migrants working at a grocery store in Manama, Bahrain. Photo credit: YWLoh/Alamy

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Introduction

Recent global challenges, such as economic crises, wars, conflicts, and the COVID-19 pandemic, have triggered widespread economic decline and increased levels of hunger and food insecurity. During the past decade, the number of people experiencing severe food insecurity has increased from 568 million in 2014–16 to 868.6 million in 2021–23, according to the latest *State of Food Security and Nutrition in the World* (FAO et al., 2024). However, there is limited data on the underlying causes and consequences of food insecurity among migrant populations in the Global South, leaving significant gaps in our understanding of their unique vulnerabilities and experiences across different migration contexts. This research gap hinders a deeper understanding of how migrants interact with food systems, their level of food security in destination countries, and how this compares to their food security in their countries of origin.

The interconnectedness between food security and migration has been recognised in the United Nations 2030 Agenda for Sustainable Development (Vidal & Laczko, 2022). Migration is shaped by a complex interplay of factors with more immediate drivers such as the pursuit of improved economic opportunities often intensified by climate change and violent conflict, While the multidimensional nature of migration makes it challenging to disentangle the specific effects of individual factors (IOM, 2021), food insecurity has been increasingly recognised as one of the main forces driving international migration (Orjuela-Grimm et al., 2022; Sadiddin et al., 2019; Warner & Afifi, 2014).

Against this background, this paper aims to examine food security and dietary diversity among low-skilled migrant workers. This group is especially vulnerable to food insecurity and often lacks access to a varied and nutritious diet. Our research aims to explore the links between migration and food security at both migrant destinations and places of origin. We also seek to understand how migrants exercise, or are constrained in, their agency during periods of acute socioeconomic uncertainty and food insecurity, such as the COVID-19 pandemic. The study focuses specifically on the Gulf Cooperation Council (GCC) region, which hosts one of the highest concentrations of migrant workers globally, many of whom are low-skilled labourers from South and Southeast Asia (IOM, 2021). These workers often experience precarious living and working conditions under the *kafala* (sponsorship) system, which restricts their mobility and access to basic welfare services, including adequate nutrition (Equidem & GLJ-ILRF, 2022; Human Rights Watch, 2023). Moreover, many rely on employer-provided meals or food allowances that may be nutritionally inadequate, heightening their vulnerability to food insecurity (Human Rights Watch, 2023).

Using data from a survey of migrant workers from Kerala in India who were employed in the Gulf Cooperation Council (GCC) region and returned during the COVID-19 pandemic, the paper analyses their dietary patterns and food consumption behaviours, and assesses how these were affected by economic shocks at their destination before and during the pandemic, and compares this to their food security at their places of origin. By identifying key vulnerabilities and coping mechanisms, the paper highlights the importance of developing targeted strategies to enhance food security for this population through an evidence-based approach.

Migration–Food Security Nexus

Among the multiple motivations for migration are aspirations for a better life, economic or family-related reasons, and push factors beyond the migrants' control (Carling, 2024; Czaika & Reinprecht, 2022; de Haas, 2021; Gamburd, 2010). While the act of migration is an aspiration towards a better quality of life and higher wages, it can also make labour migrants more vulnerable to risks and shocks at the destination, as they often fall outside of welfare systems. This form of precarity is more prevalent among less-skilled migrants who are employed in informal and less secure sectors, often lacking access to social safety nets in their destination countries (Ahmed et al., 2023). Food insecurity is a key dimension of migrant precarity and vulnerability in destination countries, particularly in the context of both North-South and South-South migratory flows (Crush & Ramachandran, 2023). For example, a study of Ghanaian migrant workers in Qatar revealed that they often forgo nutritious and diverse foods to save money for remittance to their sending households (Owusu & Crush, 2024). However, this relationship between various types of migration and food security is poorly understood, especially in the context of South-South migratory flows (Crush, 2013; Crush & Caesar, 2017; Ramachandran & Crush, 2023).

Migrant workers are not a homogeneous entity. Rather, they are a diverse group of significantly different cohorts whose lived experiences may vary widely depending on the nature of their employment contracts, the type of work they perform, their workplace conditions, gender identity, and immigration policies of destination countries. These aspects contribute to their access to formal employment and social protection (ILO, 2020, 2021), thereby creating significant differences in their food security. Studies have found food insecurity is particularly prevalent among certain groups of migrant workers, including seasonal labour migrants, irregular migrants and blue-collar workers in the Global North (Hadley, 2008; Hill et al., 2011; Mansour, 2020; Weigel et al., 2007).

Similar examples can also be drawn from the Global South. For example, a recent study on low-skilled Malayali women employed as domestic workers in Gulf Cooperation Council (GCC) countries highlights how gender-based hierarchies and systemic inequalities within the labour system exposed them to poor nutrition, wage theft, and severe restrictions on food accessibility and availability in the private households of their employers (Cherian, 2024). Migrants also face significant challenges in accessing familiar and preferred cultural foods and consumption patterns in destination countries (Njomo, 2013). A study of Zimbabwean migrants in Windhoek, Namibia, found that migrants in precarious jobs tend to have lower incomes, reduced access to nutritious and culturally familiar foods, and face greater food in-

security than the local population (Tawodzera, 2024). Social and moral obligations to send regular remittances to their family members in the sending countries can also impose financial burdens on migrants, forcing them to compromise on their food security (Owusu & Crush, 2025).

Food insecurity is influenced by both the quality and quantity of food available for consumption, so access to adequate, healthy, culturally appropriate, and preferred food is a crucial aspect of food security (Vahabi & Damba, 2013). However, weak availability and the high costs of traditional food can cause migrants to turn to nutritionally deficient and less expensive alternatives (Moffat et al., 2017). The shift in traditional eating habits after migration has been linked to detrimental effects on regular diets, including an increased risk of chronic diseases among migrant populations (Khan et al., 2020). These changes can have adverse effects on both individual health and public health systems.

Poor dietary diversity is often associated with food insecurity and is more prevalent among vulnerable socioeconomic cohorts, including migrant groups (Berggreen-Clausen et al., 2022; Lane et al., 2018). Migrants' economic constraints significantly influence their food choices and dietary variety, as lower incomes often lead to a reliance on inexpensive, calorie-dense foods with limited nutritional value. This reduced dietary diversity contributes to poor nutrition and a higher risk of food insecurity (Hernández-Vásquez et al., 2023). A key obstacle to dietary diversity is a lack of financial resources, underscoring the importance of policies and strategies that enhance migrants' economic capacity to afford adequate, nutritious, and culturally appropriate food (Vahabi & Damba, 2013). However, not all migrants experience limited dietary diversity; it is closely linked to factors such as income, employment, education, and immigration status (Essayagh et al., 2024). These challenges became even more pronounced during the economic shock of the COVID-19 pandemic (Berggreen-Clausen et al., 2022).

More focus needs to be given to how migrant food security is impacted during times of crisis. During periods of personal and external shocks and global crises, migrant status heightens the socioeconomic vulnerabilities experienced, as migrants are often excluded or not prioritized for essential public support such as food rations, healthcare, and economic relief programs (Crush et al., 2021). The temporary and contractual nature of employment also increases their vulnerability to these shocks, which can significantly affect their economic stability. They are frequently among the first to be laid off or asked to work reduced hours or pay. Their increased risk of food insecurity is further worsened by their marginalized status and limited rights, including lack of access to social and physical security in destination countries (Crush et al., 2021).

The ILO has estimated that the number of informal jobs declined sharply by 20% at the height of the COVID-19 crisis, through the second quarter of 2020 (ILO, 2022). Informal workers were most impacted because they were overrepresented in sectors or economic units hardest hit by measures such as lockdowns and containment efforts (ILO, 2020). The economic downturn caused by the pandemic further intensified food insecurity and hunger among vulnerable migrant populations in destination countries (Crush et al., 2021; Sharma, 2020; Smith & Wesselbaum, 2020). There is limited research on pandemic-related food insecurity among migrants, especially in the Asian context, which involves some of the largest South-South migration corridors.

The Kerala-Gulf Migration Corridor

The GCC states have the highest share of migrant workers worldwide, hosting approximately 14% of total migrant workers (UN DESA, 2020). Most of these workers come from South Asia, with some countries, especially India, representing five of the twenty largest global migration corridors (UN DESA, 2020). Indian workers, mainly from Kerala in the south, have been migrating to this region since the 1970s oil boom (Rajan, 2023; Rajan & Zachariah, 2019). The Kerala-Gulf migration corridor is a longstanding major route involving various types of short- and long-term labour migration. India is the leading country of origin for migrants in the GCC, accounting for nearly one-third of the region's migrant population—approximately 9.9 million people (Pew Research Centre, 2024). According to the Kerala Migration Survey 2023, there were approximately 2.2 million emigrants from Kerala, of whom about 80.5% were residing in Gulf Cooperation Council (GCC) countries (Rajan, 2024). The movement of low-skilled migrants is a critical component of these flows.

Between 2021 and 2025, the Government of India issued emigration permits to 1,241,071 low-skilled citizens for employment in the GCC countries, of which 61,424 were for residents of Kerala (Table 1). Indian citizens holding ECR (Emigration Check Required) passports are required to obtain emigration clearance or approval before leaving the country. Most ECR passport holders are either unskilled or

Table 1: Emigration Clearances (EC) issued to Migrant Workers in India for GCC Countries, 2021-2024

Year	Total number of ECs issued for GCC countries	Number of ECs issued to emigrants from Kerala for GCC countries
2021	129,262	10,549
2022	356,383	16,183
2023	380,008	18,168
2024	375,418	16,524
Total	1,241,071	61,424

Source: Ministry of External Affairs (2025)

semi-skilled workers, or work in sectors where women are frequently employed, such as nursing or domestic work. They migrate in search of better employment opportunities, higher incomes, and an improved standard of living, including food security (Abraham, 2020; Rajan, 2023). Since most migrant workers hold temporary employment contracts and short-term visas, circularity through return migration and repeat migration is a key feature of this labour migration corridor (Valenta, 2020).

Low-skilled migration is also highly susceptible to broader structural changes, including economic and political instability, as well as global crises. The COVID-19 pandemic had a profound impact on these flows, as borders were closed and stringent travel restrictions were enforced worldwide, along with socioeconomic shocks that greatly disrupted migrant employment patterns (Benton et al., 2024). Xiang et al. (2022) have used the term "shock mobilities" to highlight how migratory routines were drastically reorganized during pandemic-related periods of "acute certainty" through emergency flights from migration hubs and mass returns of migrants, primarily migrant workers. The pandemic prompted the large-scale return of Indian migrants to various parts of India, including Kerala. By the end of 2020, nearly half a million migrants from Kerala, mainly employed in the GCC countries, had voluntarily or involuntarily returned to India (Rajan & Arokkiaraj, 2022). These migrants faced massive job losses, experienced wage theft, lacked pandemic-related support and in some cases, were encouraged to return to their areas of origin (Rajan et al., 2023). Data released by various ministries of the Government of India indicate that Kerala was one of the top destinations for returning Indian migrants, and many Indian returnees were repatriated from GCC countries, namely Saudi Arabia, United Arab Emirates (UAE) and Qatar (Ministry of External Affairs, 2021, 2022). According to data released by India's Ministry of Civil Aviation (2021), 2,339,688 Indian migrants living and working in other countries returned to Kerala between April 1, 2020, and October 31, 2021.

Since many migrants had returned due to the pandemic and related economic downturn, there was an opportunity to evaluate the food insecurity of migrant workers during this crisis period. Many studies have shown that the pandemic had profoundly adverse and harsh consequences for migrant workers, especially their food security (Berggreen-Clausen et al., 2022; Cherian, 2024; Hernández-Vásquez et al., 2023; Tawodzera, 2024). The combination of informal employment, dependence on employer-provided meals or food allowances, and limited access to welfare protections would likely have meant that many migrants were unable to buffer against sudden pandemic-related income disruptions. As a result, their food security, dietary diversity, and overall well-being might have been severely compromised during the pandemic. Overall, these employment patterns could highlight how structural labour inequalities and precarious work arrangements not only heighten everyday vulnerabilities but also amplify the risks faced by low- and semi-skilled migrant workers in the GCC during crises.

Methodology

Target Population

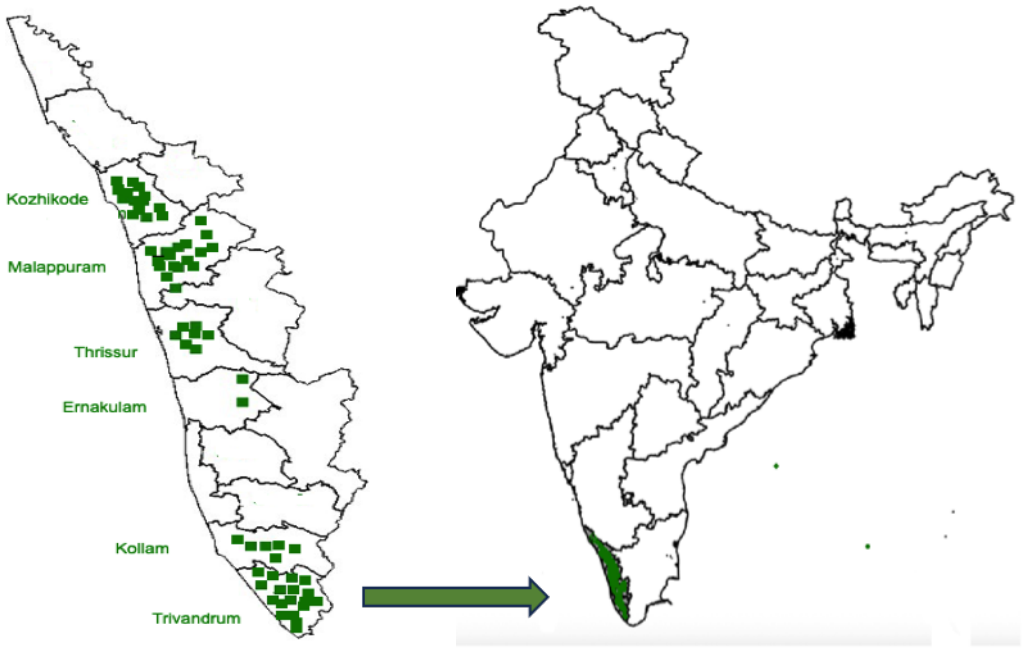
The main objective of this research was to investigate the food security and dietary diversity of migrants from Kerala who had worked in the GCC countries and subsequently returned. These returnees had worked as low- or semi-skilled migrants on temporary employment contracts in various Gulf countries and returned in 2021 and 2022, during the second and third years of the COVID-19 pandemic. Their low-skilled jobs are often marked by high levels of informality, where labour and social security laws do not adequately protect migrant workers. Additionally, the "principle of nationality" in social security systems can lead to non-citizens being excluded or receiving less favourable treatment compared to nationals, pushing many into informal employment (ILO, 2021).

According to the International Labour Organization (ILO), "employees are considered to have informal jobs if their employment relationship is, in law or in practice, not subject to national labour legislation, income taxation, social protection or entitlement to certain employment benefits" (ILO, 2003). These workers, predominantly employed on temporary contracts and engaged in low-wage occupations, often lack secure employment contracts, workers' benefits, social protection, and workers' representation, rendering them highly vulnerable to various forms of socioeconomic insecurity (ILO, 2003). Most of these low-skilled informal migrant workers are unprotected from arbitrary and unfair forms of dismissal, and they also do not receive employment benefits, such as paid leave or annual leave.

Study Area and Site Selection

For this study, we surveyed 100 return migrants who had moved back to Kerala during the COVID-19 pandemic, after working on temporary contracts in the GCC countries. The survey took place between August 2022 and April 2023 in key districts of the state that are major sources of migrant workers to Gulf countries—specifically Thiruvananthapuram, Kollam, Thrissur, Malappuram, Kozhikode, and Ernakulam (Figure 1). A pilot survey was conducted in August 2022 to inform the design and testing of the questionnaire, which aimed to collect information related to migration and food security.

Figure 1: Study Areas in Kerala



Sampling Strategy

As the main selection criterion, we focused on migrants treated as 'elementary workers' under the ISCO 2008 classification, a globally recognized four-level system for classifying all jobs based on skill level and specialization (ILO, 2008). These migrants had engaged in precarious work in the GCC countries in occupations such as construction workers, service and kitchen staff, cleaners, salon workers, and domestic workers in private households. The survey respondents were men aged 18 to 60 years. To capture the nuances in the migrant workers' experiences, we divided the reference period in the survey into non-crisis and COVID phases in the destination, as well as the post-return phase in the origin. This identification of these phases enabled a comparative analysis of food security, dietary diversity and consumption patterns across the two different periods.

The survey employed a combination of purposive and snowball sampling to recruit participants for the study. In the first stage, the main districts in Kerala known for out-migration were identified, drawing on existing literature and the key findings of the 2018 Kerala Migration Survey (KMS) organized by the International Institute for Migration and Development (IIMAD). In the second stage, residential areas within these districts with a high concentration of return migrants were identified, with the help of key informants who had also worked with the KMS data collection. The third stage involved identifying migrants who had returned from the GCC countries using a snowball sampling method with inclusion and exclusion criteria. Although the initial plan was to survey at least 30 women, we were unable to identify and interview any return migrant women.

The survey was conducted with 100 male return migrants in the identified areas of various districts in Kerala. The questionnaire was structured into key sections to collect comprehensive data on individual and household details of migrants, with a focus on migration-related aspects such as employment at the destination, experiences during periods of distress, the allocation of household income across various expenditure categories at both the destination and post-return origin, and food security metrics.

Measuring Food Security

The Food and Agriculture Organization (FAO) has defined food security as the "condition where all people, at all times, have both physical and economic access to enough safe and nutritious food to meet their dietary needs and preferences for an active, healthy life" (FAO 1996). In contrast, food insecurity occurs when individuals lack consistent access to sufficient, safe and nutritious food due to factors such as unavailability or insufficient resources (FAO, 2017). More recent assessments have framed food security around six dimensions: availability, accessibility, utilization, stability, agency, and sustainability (Clapp et al., 2022). The assessment of consumption patterns, along with dietary diversity, is crucial in evaluating overall food security. According to the FAO, dietary diversity is a qualitative measure of food consumption, reflecting a household's access to a variety of foods (FAO, 2011). Dietary diversity is essential in preventing nutritional deficiencies, including inadequate intake of essential micronutrients. Individuals who consume a diverse range of foods are more likely to receive a wide variety of vital nutrients, which contribute positively to their overall health (Dello Russo et al., 2023). Low dietary diversity can negatively impact the quality of a person's diet and hinder their ability to meet their nutritional needs.

Respondents were asked to respond to eight separate questions related to food security, specifically food access and consumption, over the previous 12 months. In the analysis, we distinguish between the respondents as a whole and those who had spent the 12 months at their GCC destination and returned in 2022 (Table 2).

Measuring Dietary Diversity

In this study, we aimed to understand the dietary diversity and consumption patterns of low skilled migrants by asking respondents which food items they or their household members consumed during a typical week at three different time periods: (i) the pre-pandemic period (2019 and earlier) in the destination country, (ii) the pandemic period, and (iii) post-return to the home country. Admittedly, using an extended recall period for (i) and (ii) has limitations and could introduce potential bias when asking respondents to recall their food consumption behaviour. However, this was the only way to approximate the effects of migration and its influence on dietary diversity.

We also evaluated the nutritional adequacy of participants' diets by measuring their dietary diversity. Respondents were presented with a list of foods and asked, 'Which of the following food items did you or any household member eat during an average week?' They were asked to indicate a number from 0 ('not eaten any day') to 7 ('eaten daily') to quantify the frequency of consumption of each item at three different time periods: (i) the pre-pandemic period at the destination, (ii) the pandemic period at the destination, and (iii) after returning to Kerala. The items were then classified into nine predefined food groups following the World Food Programme (WFP) (2008) guidelines: (1) staple starchy foods (such as grains, *kubbus*, white roots, tubers, and plantains), (2) pulses and beans (including nuts), (3) vegetables, (4) fruits, (5) meat and fish (such as poultry, liver, and organ meats), (6) dairy products (milk, yogurt, and cheese), (7) sugar, (8) oil, and (9) condiments (Table 3). Each food group was scored from 0 to 7, based on the number of days it was consumed during the week. Additionally, respondents were asked about the sources of their food, such as whether it was purchased, collected, donated, or cultivated.

Respondents were also asked targeted questions regarding specific periods of food insecurity during their stay abroad, excluding the COVID-19 pandemic, and their food security during the pandemic. They were asked if there were periods when they struggled to eat three meals a day. There were also follow-up questions about their coping strategies to deal with hunger and low food availability.

Findings and Discussion

Socio-Economic Profile of Respondents

Most of the respondents in the study had been employed in Saudi Arabia (43%) or the United Arab Emirates (UAE) (35%). Other destination countries for a smaller sample of participants included Kuwait (9%) and Oman (7%). Most respondents had completed some form of schooling. Ninety percent of participants had only completed secondary education (up to grade 10) and higher secondary education (up to grade 12). Just 6% of the cohort had studied at a university and received at least an undergraduate degree. This suggests that most respondents were relatively literate and semi-skilled, but lacked the qualifications required for

Table 2: List of Food Security Questions

	Yes/No
I and my other household members always had enough of the kinds of food we wanted to eat	
I and my other household members had enough to eat, but not always the kinds of food we wanted	
I and my other household members sometimes did not have enough to eat	
I and other household members did not have enough to eat often	
I and my other household members worried that food would run out before we got money to buy more	
The food I and my other household members bought just didn't last, and there wasn't any money to get more.	
I and my household members were unable to afford to eat balanced meals.	
I or other household members were hungry but did not eat because we could not afford to purchase sufficient food.	

Table 3: Food Groups and Food Items

Food groups	Food items
Main staples	Maize, maize porridge, rice, sorghum, millet, pasta, bread, and other cereals, cassava, potatoes, sweet potatoes, *kubbus*, plantains
Pulses	Beans, peas, groundnuts, and cashew nuts
Vegetables	Vegetables, leaves
Fruits	Fruits
Meat and fish	Beef, goat, poultry, pork, eggs, and fish
Milk	Milk, yoghurt, and other dairy products
Sugar	Sugar and sugar products, honey
Oil	Oils, fats, and butter
Condiments	Spices, tea, coffee, salt, fish powder, small amounts of milk for tea

Source: WFP (2008)

higher-paying or more secure jobs. It also aligns with the typical profile of low-skilled migrant labourers from Kerala in the GCC who often occupy physically demanding, low-wage employment (Table 4).

Approximately 85% of the respondents were married. However, only four respondents had taken their families with them when they migrated. The others had employment contracts that likely did not permit their close family members to migrate with them, even temporarily. The inability to migrate with family members may also indirectly affect workers' dietary habits and food security. Living alone in shared housing or camps means limited access to home-cooked, culturally familiar, and nutritious food. Instead, many rely on employer-provided meals or cheap, low-quality food options, factors that can contribute to nutritional inadequacies and poor health outcomes.

Most respondents were unskilled or semi-skilled workers concentrated in low-wage work. Two-thirds had been engaged in informal, temporary employment in GCC countries, without job security and offering few employment benefits. Table 5 provides a list of actual occupations. This pattern underscores the structural precarity of migrant labour in the region, where restrictive labour policies and the *kafala* (sponsorship) system often limit their bargaining power and legal protection (Amnesty International, 2020). The lack of stable employment and social safety nets exposes workers to income instability and economic vulnerability, conditions that can directly influence their ability to secure adequate and nutritious food (Equidem & GLJ-ILRF, 2022; FAO et al., 2024). This is particularly pronounced during periods of socioeconomic shock, such as the COVID-19 pandemic, when many individuals experienced job losses, wage delays, and movement restrictions that disrupted their access to food and essential services (FAO et al., 2024; IOM, 2021).

Reasons for Return to Kerala

Around 20% of the respondents returned to Kerala in 2020, another 35% in 2021, and the remaining 45% in 2022. More than two-thirds (77%) said they had returned permanently. Table 6 presents the primary reason cited for the return. Nearly one-quarter identified the COVID-19 pandemic as the primary reason for their return. Another 22% reported adverse working conditions as the reason for their return (poor working conditions, being underpaid, job loss, and contract expiry), underscoring the significant impact of the pandemic's economic downturn on migrant livelihoods. Some mentioned that they returned to re-emigrate to a different job or to work in Kerala, an indication of their marked

Table 4: Profile of the Survey Respondents

Category		% Share
Destination	Saudi Arabia	43.0
	UAE	35.0
	Kuwait	9.0
	Oman	7.0
	Qatar	4.0
	Bahrain	2.0
Age group	20-29	15.0
	30-39	47.0
	40-49	20.0
	50-59	16.0
	60-65	2.0
Gender	Male	100
	Female	0.0
Marital status	Never married	15.0
	Currently married	85.0
Educational level	Illiterate	1.0
	Primary	3.0
	Secondary	58.0
	Higher secondary or equivalent	32.0
	Graduate	6.0
Type of employment contract	Regular	27.0
	Contractual	67.0
	Daily/hourly periodic	2.0
	Self-employment	3.0
	Others	1.0
Type of living arrangement	Family at destination	4.0
	Family at origin	96.0

Table 5: Types of Occupation and Economic Activities in GCC Countries		
Category	**Occupations**	**%**
Elementary occupations	Field staff, helper, construction worker, delivery person, oil field worker, tile worker, glass cutter, loading worker, car washer/cleaner, domestic worker, burger maker, general worker	32.0
Plant and machine operators and assemblers	Driver, cars service, cargo loading, printing, scrap shop	20.0
Craft and related trades workers	Tailor, aluminium fabrication worker, technician, mason, carpenter, painter, plumber, welder, fashion designer, interior designer	18.0
Service and sales workers	Salesman, waiter, hotel cook, security guard, domestic worker, gardener, trading company worker	18.0
Clerical support workers	Accounting, office administration, billing section, storekeeper, purchaser, production manager	7.0
Self-employment/miscellaneous	Self-employed, other	5.0
Total		100.0

Table 6: Reasons for Return Migration		
Category	**Reason**	**%**
Pandemic	COVID-19	24.0
Employment or work-related aspects	Poor working conditions	11.0
	Low wages	5.0
	Lost job/laid off	3.0
	Expiry of employment contract	3.0
	To migrate for different job	3.0
	Prefer to work in Kerala	2.0
	Illness/accident	3.0
Family and personal reasons	To be with family	7.0
	To retire	3.0
	Visiting visa expired	2.0
Other reasons		27.0
No response		7.0
Total		100.0

dissatisfaction with employment conditions at the destination. Family and personal considerations accounted for a smaller share, with 7% returning to reunite with family and 3% to retire. The 27% of 'other reasons' included a mix of individual circumstances and structural policies that led to uncertain futures at the destination and were exacerbated by COVID-19. Overall, the data suggest that both external shocks, such as the pandemic, and ongoing structural issues in migrant labour conditions significantly influenced the return migration of our respondents.

In sum, the responses suggest that return migration was driven by acute external shocks, such as the COVID-19 pandemic, and chronic structural vulnerabilities in GCC labour conditions. Migrants faced a combination of precarious employment, limited social protections, and economic instability, which, when compounded by the pandemic, prompted many to return permanently to Kerala.

Food Security

Overall, only 17% of the respondents always had enough of the kinds of food they wanted to eat in the previous 12 months (Table 7). Close to three-fourths (72%) reported that while they had enough to eat, they did not always have access to the types of food they wanted to consume. Approximately one-third of the participants had been concerned that their food would run out before they could afford to purchase more, and a similar number reported not having a balanced diet. And 28% reported having actual experience with this scenario. Around 9% reported that they sometimes did not have enough to eat, but only 1% said that this often happened.

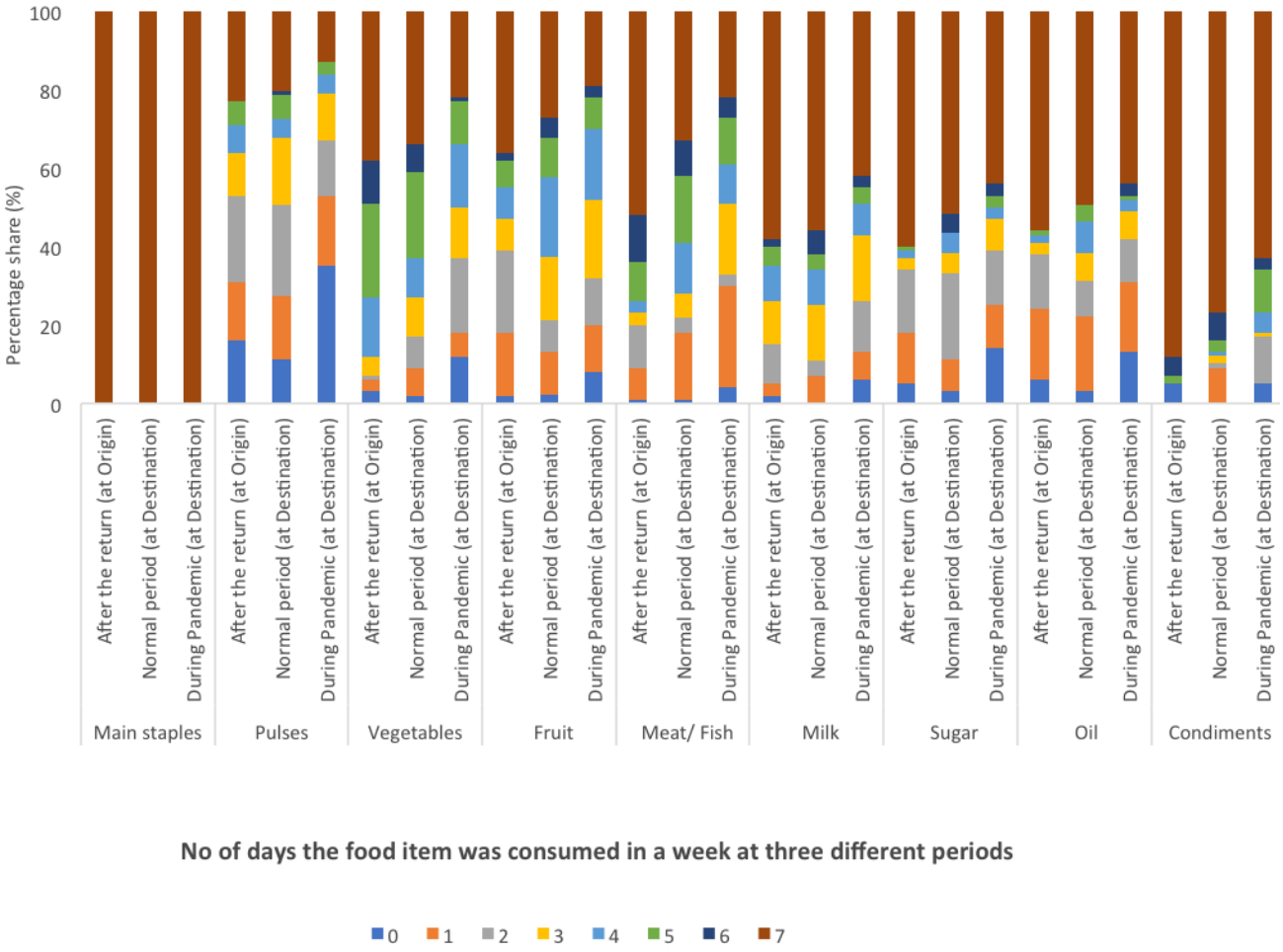
To understand the extent of food insecurity at the destination, we analyzed the same set of questions for migrants for the sub-sample who returned in 2022, just before the survey. The share of migrants who always had enough to eat at their destination was 16%, which is consistent with the overall sample. However, the proportion of migrants who sometimes did not have enough to eat was also 16%, up from 9% in the overall sample. Moreover, about a quarter of respondents reported being unable to afford a balanced diet at the destination. Among them, 11.1% also reported feeling hungry because they could not afford sufficient food.

Table 7: Migrant Food Security in the Last Twelve Months		
	Overall sample (% yes)	**At destination (% yes)**
I and my other household members had enough to eat, but not always the kinds of food we wanted.	72.5	68.2
I and my other household members worried that food would run out before we got money to buy more.	31.0	22.2
I and my household members were unable to afford to eat balanced meals.	30.0	25.6
The food I and my other household members bought just didn't last, and there wasn't any money to get more.	28.0	22.2
I and my other household members always had enough of the kinds of food we wanted to eat.	17.4	15.9
I and my other household members sometimes did not have enough to eat	9.2	15.9
I or other household members were hungry but did not eat because we could not afford to purchase sufficient food.	9.0	11.1
I and other household members did not have enough to eat often.	1.0	-

Dietary Diversity

Figure 2 illustrates the dietary diversity of migrants at the three different time points. It shows that staples were eaten daily by all respondents (on all 7 days of the week) in all locations. The frequency of consuming all the other food groups was highest on return to Kerala and lowest during the pandemic in the GCC. The discrepancy was particularly noticeable for more nutritious foods. Only a small percentage of migrants reported eating fruits, dairy, meat, vegetables, and pulses daily during the pandemic period. The share of respondents who reported consuming these nutritious foods after their return to Kerala increased significantly.

Figure 2: Dietary Diversity at Different Time Periods



Digging deeper into dietary diversity, the proportion of migrants who consumed pulses (beans, nuts) daily was lower during the pandemic compared to the non-crisis period at the destination and after their return to Kerala. Similarly, vegetables were consumed more frequently by migrants on return, followed by the non-crisis period at the destination. Vegetable intake was significantly lower during the pandemic at the destination. For example, the percentage of migrants who consumed vegetables daily was 38% after their return, 34% during the non-crisis at the destination, and 22% during the pandemic at the destination (Table 8).

Regarding meat and fish consumption, approximately 52% reported consuming meat or fish daily at the origin after their return. In contrast, this share was lower at 33% during the non-crisis period at the destination and 22% during the pandemic. The percentages for dairy products were 58%, 56%, and 42% at origin after their return, during the non-crisis period at the destination, and during the pandemic, respectively. Very few migrants reported not consuming meat or dairy products on any of the seven days.

For nutritious and high-value foods such as pulses, vegetables, fruits, meat, fish, and milk, migrants were more likely to consume these items daily in Kerala; however, their consumption frequency decreased during non-crisis and pandemic periods at their destination. This highlights that migrants who move in search of better jobs and livelihoods are likely to sacrifice dietary diversity at their destination. The pandemic worsened these dietary deprivations at the destination, further reducing dietary diversity and causing migrants to skip nutritious foods more often than usual. Over one-third (35%) of respondents reported not eating pulses at all during the seven days of the pandemic, although pulses are a staple in Kerala's diet. Approximately 12% reported not eating vegetables during this period. Fruit consumption followed a similar pattern to vegetables. Overall, the number of days with high-nutritional-value food intake decreased during the pandemic. The study reveals that the dietary diversity of survey respondents significantly reduced during the pandemic.

Respondents were also asked a set of perception-based questions to assess whether they felt better, worse, or the

Table 8: Frequency of Food Group Consumption at Three Time Periods (%)

Number of days the food item was consumed in a week	0	1	2	3	4	5	6	7
After returning to Kerala								
Main staples	0	0	0	0	0	0	0	100
Pulses	16	15	22	11	7	6	0	23
Vegetables	3	3	1	5	15	24	11	38
Fruit	2	16	21	8	8	7	2	36
Meat/Fish	1	8	11	3	3	10	12	52
Milk	2	3	10	11	9	5	2	58
Sugar	5	13	16	3	2	1	0	60
Oil	6	18	14	3	2	1	0	56
Non-crisis week at the destination								
Main staples	0	0	0	0	0	0	0	100
Pulses	11	16	23	17	5	6	2	20
Vegetables	2	7	8	10	10	22	7	34
Fruit	2	11	8	16	20	10	6	27
Meat/Fish	1	17	4	6	13	17	9	33
Milk		7	4	14	9	4	6	56
Sugar	3	8	22	5	5	0	5	52
Oil	3	19	9	7	8	5	0	49
During the pandemic at the destination								
Main staples	0	0	0	0	0	0	0	100
Pulses	35	18	14	12	5	3	0	13
Vegetables	12	6	19	13	16	11	1	22
Fruit	8	12	12	20	18	8	3	19
Meat/Fish	4	26	3	18	10	12	5	22
Milk	6	7	13	17	8	4	3	42
Sugar	14	11	14	8	3	3	3	44
Oil	13	18	11	7	3	1	3	44

same in terms of consuming nutritious foods, dietary diversity, and food access after returning to Kerala (Figure 3). Approximately three-quarters of the respondents felt that their access to food had improved after returning home. Around 60% indicated that their diet had become more diverse, and 61% thought that the consumption of nutritious food was better in Kerala than it had been while abroad.

Crisis and Food Insecurity: Navigating the Agency of Migrant Workers

It is now well-documented how COVID-19 disrupted the stability of food systems, both globally and locally, leading to spiralling food prices, worsening food security, and increasing global hunger figures (Crush et al., 2021). These dramatic changes had severe repercussions for the migrant populations. Here, we examine how migrant workers, operating with reduced agency and lacking formal social protection while abroad, sought to mitigate their vulnerabilities during the crisis. Approximately a quarter of the respondents reported being severely food insecure during the pandemic at their destination (Figure 4). Nearly 20% reported losing body weight during the COVID-19 pandemic because of inadequate food consumption. Additionally, about 22% and 9% reported eating less than the required dietary norms and skipping meals, respectively, because they could not afford sufficient food. In times of crisis with no job security, migrants often rely on others for necessities, particularly food. Around 28% reported situations in which they had to rely on friends, relatives, community organizations, or employers for food. This period of dependence typically lasted between one and three months.

Most received assistance from community-based and expatriate organizations, with the Kerala Muslim Cultural Centre (KMCC) emerging as the primary source of aid. Nearly one-fourth of the respondents reported receiving help from KMCC, either directly or in collaboration with other organizations. Additional support came from entities like the Abu Dhabi Workers' Union, individual benefactors, and some employers. This marked reliance on migrant and diaspora networks, as well as other charitable institutions, underscores the crucial role of informal support systems in safeguarding food access for distressed migrants during the COVID-19 pandemic.

Figure 3: Perceptions of Food Access and Dietary Diversity in Kerala

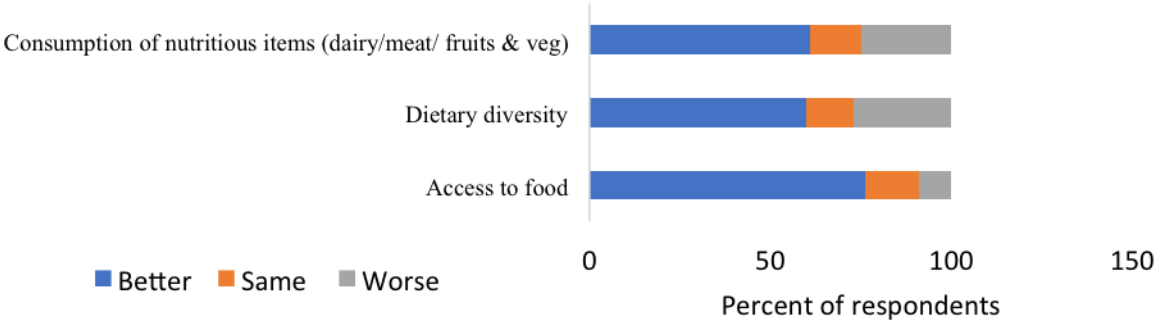
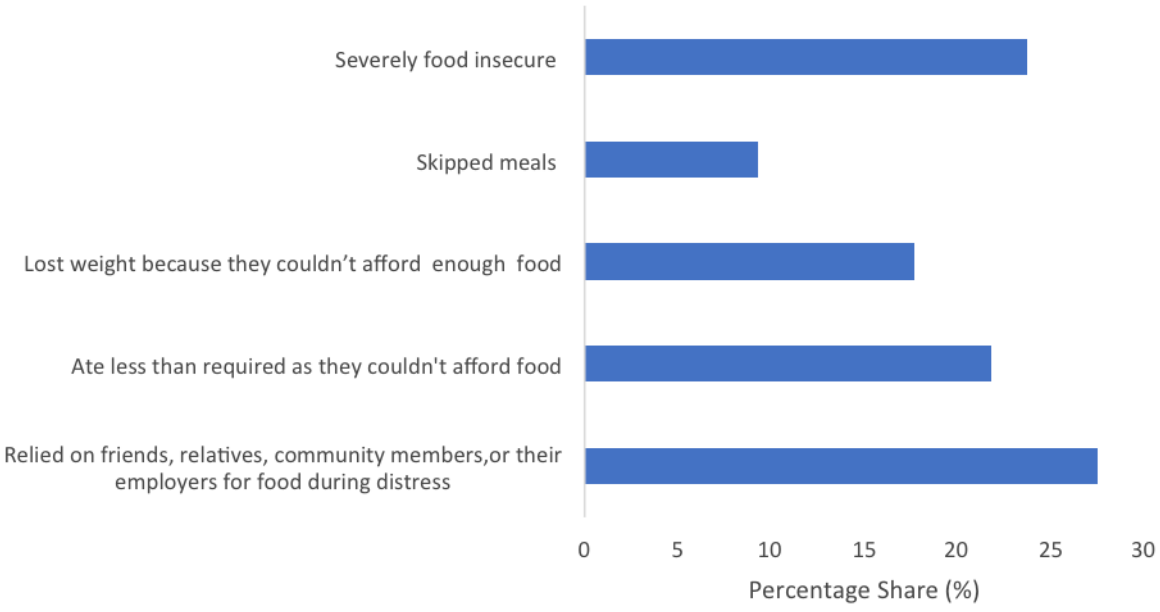


Figure 4: Severe Food Insecurity Among Migrant Workers in GCC Countries During the COVID-19 Pandemic



Conclusion

The United Nations Network on Migration (n.d.) has underscored the connection between migration and food security, emphasizing the importance of empowering migrants as active agents of positive change for building sustainable food systems. However, there remains limited research on the migration-food security nexus, particularly concerning the food security status and dietary diversity of migrants across major migration corridors in the Global South. This study, based on a primary survey of return migrants in Kerala who were employed in low-skilled jobs in the GCC, offers new insights into this underexplored area. While the pandemic exacerbated global and local food production and supply chains, affecting all aspects of food security, including availability, accessibility, utilisation, and stability, it also deepened pre-existing inequalities within these domains. It further exposed the vulnerabilities embedded in the transnational labour migration system, which was reflected in the heightened risks of low-skilled migrant workers to food insecurity and other socioeconomic hardships.

The study found that migration did not lead to an improvement in the food security of this group of low-skilled migrants in the GCC countries. Moreover, during the recent COVID-19 pandemic, their food insecurity and dietary diversity worsened rapidly. Nearly one-quarter of respondents in this study reported experiencing severe food insecurity due to the pandemic. With limited job security and few protections, migrants had to rely on others for essentials, particularly food, emphasizing their limited agency during crises. The study thus highlights the role of informal community support systems in helping migrants navigate vulnerabilities and maintain access to food during times of crisis in destination countries. Many return migrants reported that their access to food, particularly high-value and nutritious items, and dietary variety improved after returning to Kerala.

Civil society organizations are most efficient at addressing migration and foreign worker issues at the grassroots levels. This is particularly noteworthy given that non-native residents in the GCC are largely prohibited from forming unions or associations, with only limited allowances for foreigners to operate private foundations under specific conditions. Despite these constraints, local diaspora NGOs and community groups can play a vital role in supporting migrants, providing services, promoting cultural and linguistic inclusion, and collaborating with trade unions to enhance worker protection for migrant populations (Bartoszewicz & Lang, 2024).

The pandemic exposed the multiple and overlapping risks faced by migrant workers in the destination countries, underscoring the urgent need to address decent work deficits and informal employment conditions. As marginalized populations with limited rights in destination countries, migrants remain at risk of exclusion from various mitigation measures and social protection schemes. These conditions have profound implications for their food security during periods of crisis. Some migrant-receiving countries have made progress in this regard. For instance, Spain and Morocco have signed Social Security Agreements, which ensure equal treatment of migrant workers under their social security legislation and encourage formal employment (ILO, 2021). Similarly, Mexico has implemented social security programmes that not only provide access to healthcare but also extend coverage to informal sector workers and allow voluntary enrolment for migrants employed temporarily (ILO, 2021).

In the GCC, Oman has recently introduced a unified social insurance system that covers health, parental leave, and workplace injuries for both nationals and migrants, marking progress toward an inclusive, rights-based social protection framework through effective cooperation and participation with trade unions and migrant workers (ILO, 2024). India already has bilateral agreements in place with GCC nations on transnational labour migration, which include provisions for migrant welfare. Given the long-standing migration connections between India and the Gulf Cooperation Council (GCC) countries, there is a strong case for strengthening these existing Memoranda of Understanding (MoUs) to enhance the social protection for migrant workers, especially during crises. It is essential to establish systems that effectively uphold and monitor the fundamental human rights and social security, including food security, for vulnerable migrant workers, during non-crisis and crisis periods, regardless of their contract type and residence status.

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