

A Sociological Study of Food Insecurity among Low-Income Families in District Faisalabad

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DOI: <https://doi.org/10.70670/sra.v3i4.1285>

Abstract

Food insecurity is becoming a global challenge, whereas many South-East Asian countries, like Pakistan, with an agricultural background, are facing the paradox of food insecurity and food waste. Whereas food security means access to an adequate amount of food, which is safe, nutritious, and fulfills the dietary requirements for a healthy and active life, it should be guaranteed. In Pakistan, around 37% of the population has a moderate to severe food-insecure situation. This study aims to determine the extent and the risk and illness of the condition in rural poverty of Faisalabad. The study is cross-sectional and quantitative in nature, and primary data were collected from 120 households obtained through a random sampling technique to administer a pre-structured questionnaire. The findings of the study revealed that the rural participants experienced the worst effects because of lower dietary diversity. More than half of the respondents (59.1%) of the respondents, the impact was significant due to clinical diagnosis of moderate to severe tiredness, and malnutrition was a chronic illness. Bivariate analysis illustrated that expectations concerning average household size, household expenditures, and consumption did not yield consistent growth concerning perceptions of food sufficiency with income. All income levels reported food insecurity, with middle-class income (30,000-60,000 PKR) comprising 44.4% of those occasionally food insecure. This shows that more than the poor, inflation and price rises have made more people vulnerable. The analysis shows that food insecurity is a complex problem that intertwines poverty, unemployment, inflation, and poor systems and infrastructure in Faisalabad. Integrated policy response is required, encompassing income support schemes, rural infrastructure development, nutrition education, and selective food aid while considering food security as a public health and human rights concern.

Keywords: Food insecurity; Low-income households; Rural–urban inequality; Socioeconomic determinants; Health impacts; Pakistan

Introduction

Food insecurity is a critical global issue that impacts health, productivity, and social cohesion. It is not only about the supply of food but also the accessibility, cost, and quality. The Food and Agriculture Organization (FAO, 2023) stated that more than 735 million people were hungry in 2022, and 2.4 billion were experiencing moderate to severe food insecurity, predominantly in low and middle-income countries that were being challenged by poverty and climate stress. Pakistan is one of the food-insecure countries in South Asia, with 37 per cent of its population being food insecure (UNICEF, 2023). Chronic poverty, inflation, poor infrastructure, and climate shocks, not least floods across Sindh and Punjab in 2022, have devastated farming and driven millions from their homes. Food prices have been escalated and access curtailed due to global supply chain disturbances owing to the COVID-19 pandemic and wars. Faisalabad district encompasses the vulnerabilities of both rural and urban areas.

Inflation and wage dependency plague urban households, while rural communities live in a different world, fighting market inaccessibility and seasonal unpredictability. Food insecurity causes malnourishment, exhaustion, and chronic illness (Levi, 2023; Jandaghian-Bidgoli et al., 2024). Women are known to give up their own meals to save their children (Rahi et al., 2025).

Food insecurity is a matter of food availability, access, as well as food affordability, quality, and stability (FAO, 2022; FAO, 2023). Sub-Saharan research indicates that it is context-specific and gendered. Houses led by a woman are more likely to suffer from food insecurity (Negesse et al., 2020), and rural homes frequently make use of coping mechanisms, including meal skipping and rationing of food (Dlamini et al., 2024; Biadgilign, 2023). Chronic disease, psychological distress (Levi, 2023; Jandaghian-Bidgoli et al., 2024), and substandard educational and psycho-social outcomes amongst children (Bell et al., 2023) are associated with food insecurity. In Pakistan, food insecurity afflicts about 37% of the population for reasons of poverty, inflation, poor infrastructure, and climate shocks (UNICEF, 2022; IPCC, 2022; UNICEF, 2023; FAO, 2023). Inflation and wage laborers characterize urban households, while rural family members face the recognition of the market, its access, and seasonal fragility (World Bank, 2024; Rahi et al., 2025). Background variables, age, gender, family size and structure, income, occupation, and employment status, are related to key food security variables, such as frequency of food scarcity, food scarcity causes, coping mechanisms, dietary diversity, knowledge of food assistance, contentment with food quality, and alterations to eating routines. This also affects physical health, mental health, education, family dynamics, access to safe water, and social dignity. Theoretical models such as Economic Constraint, Social Determinants of Health, and Structural Vulnerability describe the processes by which these factors influence the experience of HFI (Nord & Petitjean, 2002; Quesada et al., 2011; Marmot et al., 2012; Gundersen et al., 2015; WHO, 2021; Aljahdali et al., 2024).

The only premise in Economic Constraint Theory is that food insecurity is a consequence of not having enough money. Under this explanation, when families cannot afford enough food, their capacity to buy enough safe and nutritious food is greatly compromised.

According to the Social Determinants of Health Theory, health outcomes, including food security, are most influenced by the social and economic conditions of where people live. This theory proposes that food insecurity is not just a product of individual decisions or biological factors but is heavily influenced by more general and systematic social contexts like poverty, education, employment, housing, and access to health care.

The research explores the relationship between economic and social disparities and food insecurity in Faisalabad and advocates for a policy framework that incorporates poverty reduction, social protection, and climate adaptation.

1. To assess the socioeconomic profile of respondents, including education, income, occupation, and family size.
2. To examine the relationship between poverty and food insecurity.
3. To analyze bivariate associations between food insecurity and independent variables such as income, household size, and education.
4. To investigate the impact of food insecurity on physical and mental health outcomes.
5. To suggest evidence-based measures to reduce food insecurity in vulnerable populations.

Methodology

This study was conducted in District Faisalabad, which lies in the plain areas, in Tehsil Jaranwala under Rural Punjab, to explore the experiences of food insecurity among the low-income families. The target population of the study was poor households that had a monthly income of less than the national poverty threshold. At the start, the researcher asked for the monthly income of the respondents. Through a purposive sampling technique, only those households were included that were living below the poverty line. Furthermore, to avoid any possible prejudice and to provide equal representation of all the subjects, a total of 120 households were chosen by simple random sampling. A structured questionnaire was used with a view to evaluating the feasibility and understandability of questions and

instructions. Based on a review of the literature and expert consultation, the survey was developed and translated into local languages. Information was gathered on sociodemographic characteristics, income, frequency and causes of food depletion, coping mechanisms, diet diversity, and health implications. The answers were coded and input into the Statistical Package for Social Sciences (SPSS) for analysis. A descriptive analysis with frequencies and percentages was conducted to describe the household profile. Socio-economic factors and food insecurity outcomes were tested for association using chi-square and gamma correlations (bivariate analyses). Ethical procedures, including anonymity, confidentiality, voluntary participation, and sensitivity in the interviews, were observed in the study. This provided the foundation for a comprehensive and ethically sound analysis of the social and economic factors underlying and resulting in health-related implications of food insecurity in the rural areas of Faisalabad.

Results

Variable	Categories	Frequency (n)	Percentage (%)
Age	20–30 years	32	26.7
	31–40 years	44	36.7
	41–50 years	28	23.3
	51+ years	16	13.3
Education	Illiterate	36	30.0
	Primary	28	23.3
	Middle/Matric	34	28.3
	Intermediate & above	22	18.4
Occupation	Daily wage labor	40	33.3
	Agriculture/farming	30	25.5
	Factory/industrial worker	28	23.3
	Small business/service	22	18.4
Monthly Income (PKR)	Under 30,000	50	41.7
	30,001 – 40,000	15	12.5
	40,001 – 50,000	19	15.8
	50,001 – 60,000	19	15.8
	Above 60,000	17	14.2
Family Size	3–5 members	28	23.3
	6–8 members	56	46.7
	9+ members	36	30.0

Table 1 shows the demographic information of the respondents. The age, sex, and income of the respondents are the variables that are directly linked to food insecurity. Most of the respondents were in the young age groups. 30% of the respondents were illiterate, whereas 23% and 28% had passed primary and matriculation, respectively. The economically active were 20–40 years of age: 63.4% of the participants were in this age group, but they were mostly illiterate or primary educated, 53.3% and they could not offer them skilled work. The work was, predictably, predominantly in precarious jobs: 33.3% were daily-wage laborers, and 25.5% were working in agriculture/farming. The income was meagre. With the revised income groups, 41.7% had a monthly income of less than PKR 30,000, while just 14.2% had a monthly income of more than PKR 60,000, showing low financial strength. Large family size and high dependency ratio were more common: (76.7%) had ≥ 6 family members, and this put pressure on household finances.

This is like older studies which found low education, unemployment or underemployment, low income, and having more children were significant determinants for food insecurity (Ahmed et al., 2020; Khan & Ali, 2022). Socioeconomic deprivation of this nature also exacerbates vulnerability and precludes the option of access to adequate and nutritious food, even if an income is available.

Table 2: Reported Causes of Food Insecurity

Cause	Frequency (n)	Percentage (%)
Low income	32	26.7
Lack of market access	30	25.0
Large family size	25	20.8
Unemployment	17	14.1
Rising food prices	16	13.3

Among the respondents, the prevalent determinants of food insecurity were low income (26.7%) and poor access to markets (25.0%), suggesting both financial and infrastructural factors. More than one-fifth (20.8%) of large families were at even greater risk to this part, and unemployment (14.1%) and escalating prices of food (13.3%) played additional roles. Health consequences were also significant, with 59.1% reporting moderate to severe fatigue, undernourishment, or having a chronic illness. This is consistent with existing literature that establishes low income, poor access to markets, and household size as determinants of food insecurity with associated adverse health results (Ahmed et al., 2020; Smith et al., 2021). The findings add weight to the evidence that food insecurity is multifaceted and is dependent on economic and social factors as well as health status, not just income.

Table 3: Local markets' ability to meet food needs.

Market Access Level	Frequency (n)	Percentage (%)
Very well	26	21.67
Well	21	17.50
Neutral	25	20.83
Poorly	19	15.83
Very poorly	29	24.17
Total	120	100.00

Survey results revealed the skewer of market satisfaction, with only 39.17% of respondents agreeing that the local market was performing well in meeting the demand for food, 40% expressed dissatisfaction. This suggests that a market may serve some households but not others (due to high prices, inferior quality, and unreliable supply – especially in marginalized or remote regions). Khan and Younas (2021) also illustrate that distance and price peaks affect rural food insecurity. The (20.83%) neutral respondents may indicate access variability; farmers may have access to one product, or a hired worker may have access to one product. However, food may be highly processed and poor in nutrition, or it could be too expensive due to inflation and seasonal price variation, as Fatima and Latif (2022) observed.

This uneven performance of the markets demonstrates that local food systems must be radically transformed. The means of increasing food security is not simply about greater incomes or more production, it is about improved pricing of food, distribution of food, and providing access to food. Such policy interventions might manifest themselves as investments in infrastructure (e.g., transportation or cold storage) that increase the dependability of local markets. Aslam et al. (2023) posit that resilient food systems are underpinned by resilient food supply chains and local

infrastructure. Markets are a solution and a problem in this context. Models like portable markets or cooperatives could fill in gaps.

Table 4: Monthly Family Income vs. Sufficiency of Household Income to Meet Basic Food Needs

Levels of satisfaction of Monthly Income	Yes, always	Most of the time	Sometimes	Rarely	Never	Total
	F(%)	F(%)	F(%)	F(%)	F(%)	F(%)
Under 30,000	4 (16.7)	4 (16.7)	4 (16.7)	6 (25.0)	6 (25.0)	24 (20)
30,001 – 40,000	1 (4.3)	8 (34.8)	4 (17.4)	4 (17.4)	6 (26.1)	23 (19.2)
40,001 – 50,000	5 (20.0)	9 (36.0)	4 (16.0)	3 (12.0)	4 (16.0)	25 (20.8)
50,001 – 60,000	6 (20.7)	3 (10.3)	4 (13.8)	7 (24.1)	9 (31.0)	29 (24.2)
Above 60,000	3 (15.8)	6 (31.6)	2 (10.5)	4 (21.1)	4 (21.1)	19 (15.8)
Total	19 (15.8)	30 (25.0)	18 (15.0)	24 (20.0)	29 (24.2)	120 (100)

The table above shows a multifaceted distribution of income-sufficiency perceptions across income groups. Another set (less than or equal to 30,000) also indicated that their income “rarely” (25%) or “never” (25%) satisfied their basic food needs. Likewise, among those with income 30,001–40,000, the majority of respondents only reported “most of the time” (34.8%) or “never” (26.1%) having enough income for food. Moreover, even in such relatively higher income groups as 50,000–60,000, a not-insignificant percentage still reported rare (24.1%) or never sufficient income (31%), which suggests that the higher the sufficient income perception, the less likely it is that the perception varies linearly across income levels.

Table 5: Awareness of Government Food Assistance Programs vs. Usage of Government or NGO Food Aid Programs

Awareness Level	Yes, regularly	Yes, occasionally	Tried but was denied	Never applied	Applied but still waiting	Total
	F(%)	F(%)	F(%)	F(%)	F(%)	F(%)
Yes, fully aware	3 (12.5)	8 (33.3)	5 (20.8)	4 (16.7)	4 (16.7)	24 (20)
Somewhat aware	3 (12.5)	6 (25.0)	3 (12.5)	4 (16.7)	8 (33.3)	24 (20)
Heard about them	6 (23.1)	6 (23.1)	4 (15.4)	6 (23.1)	4 (15.4)	26 (21.7)
Barely aware	5 (20.8)	3 (12.5)	5 (20.8)	3 (12.5)	8 (33.3)	24 (20)
Not aware at all	3 (13.6)	6 (27.3)	3 (13.6)	4 (18.2)	6 (27.3)	22 (18.3)
Total	20 (16.7)	29 (24.2)	20 (16.7)	21(17.5)	30 (25.0)	120 (100)

The table above shows contrasting levels of awareness and utilization of government or NGO food aid programmes as displayed in a cross-tabulation. Among the respondents who were fully aware of these programs, usage was diverse, with 33.3% using them sometimes and 20.8% receiving rejected support. Importantly, not only did some of those who had heard next to nothing or nothing at all have

nevertheless availed themselves of the programs—for example, 20.8% in the barely aware category reported using the aid regularly, and 27.3% of those who were unaware had used it occasionally or were still waiting for the help. This indicates that knowledge does not consistently result in the use of the program, a phenomenon possibly influenced by people learning about the program at the community level via word-of-mouth or pressing need prompting individuals to seek assistance regardless of prior knowledge.

Discussion

The results of this study corroborate earlier studies indicating that poverty, curtailed income, precarious employment, and inflation serve as the primary causes of food insecurity (Ahmed et al., 2020; Khan & Ali, 2022). Most of the respondents were day labourers or farmers, like previous studies, indicating that financial capacity plays a huge role in a person's ability to get sufficient food. Higher household size was positively associated with increased risk of vulnerability in line with previous studies (Negesse et al., 2020; Dlamini et al., 2024). The weak association between earnings and food sufficiency perceptions aligns with the results obtained by Hameed (2024) and Bint-e-Ajaz (2023), who assert that following inflation, the buying power of middle-class households declines. Market-related complaints—limited availability, high prices, and erratic supply—are consistent with previous findings (Khan & Younas, 2021; Fatima & Latif, 2022) and suggest that poorly developed infrastructure continues to constrain the availability of food, particularly in the countryside. The health effects, such as exhaustion and long-term illness, are consistent with global literature that associates food insecurity with poor physical and mental health outcomes (Gundersen et al., 2015; Levi, 2023). The anger experienced by households also aligns with the Social Determinants of Health model. Lastly, as observed in Brown et al. (2022) and UNICEF (2021–2023), knowledge of food assistance schemes did not translate into uptake, suggesting barriers at a structural and access level. In summary, the findings of the study support previous findings and indicate that inflation and poor market systems are exacerbating food insecurity in Faisalabad.

Conclusion and Recommendations

Food insecurity in the District Faisalabad is a poverty-driven phenomenon and is caused by unemployment, inflation, large family size, limited access to markets, and low level of income, and it is not only a matter of nutrition, but also affects the health, education, and social life of people. The results emphasize the importance of considering food security as a human rights and public health issue. Tackling the problem appears to call for economic, infrastructure and educational, and policy measures. Based on the research, it is recommended to scale up coverage of targeted cash transfers and social safety networks such as the Benazir Income Support Programme (BISP) to enhance household purchasing power and cushion them against economic shocks. Infrastructure development, including enhancement of transport, market, and irrigation infrastructure, to increase productivity in agriculture and along with the food supply chain, which will directly affect the income of the farmers, so that they can invest in their food security. The cooperative and community-based interventions on affordable, nutritious diets and family planning (particularly for populations with low literacy levels) should be initiated. The creation of subsidized food centers and linking them to health services for vulnerable beneficiaries – women-headed homes, daily wage workers, and the like can help in food security at the household level.

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