Food Security and Social Inequalities from the Perspective of Women's Rights: Case Study of District Torghar

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ARTICLE DETAILS

**ABSTRACT**

**Purpose:** The research study was designed with the sole aim to explore the food security status in the purview of women’s rights in the District Tor Ghar, KP, Pakistan

**Methodology:** A sample size of 291 out of 760 household heads was selected randomly from 3 villages of Khander Tehsil namely Bilyani, Bimbal, and Dharo. The conceptual framework comprised of an independent variable (availability of food) and one dependent variable (food insecurity). Data on study variables were collected using the Likert scale. The Chi-square test was applied to test the strength of association among study variables.

**Findings:** The study found that the limited availability of vegetables, fruits, bread, and meat required for a daily meal for women alongside sufficient milk/dairy products and dry fruit to feed women at home, were found significant (p <0.05) in association with food insecurity. Thus, lack of availability of food is the root cause of food insecurity among women of the study inhabitants.

**Implications:** A policy drive led by an awareness-raising campaign at an institutional, cultural, and societal level that ensures the availability of a sufficient amount of quality food to all social segments to overcome the problem of food insecurity, especially concerning women folk was the major study recommendations.

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**Introduction**

“Food security exists 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” (FAO,
The food availability approach has been popularized by Thomas Malthus (1789) and its core idea was outlined by Venetian thinker Giovanni Botero (1588). This idea describes food insecurity as an imbalance between food and population. To maintain the balance the growth of food availability should not be less than population growth and the availability of food should be sufficient for the population (Rezaul et al. 2015 Pangaribowo et al., 2013) and available on a consistent level for an individual in the practical and affordable range (FAO, 2006, 2009). The adequacy of food is accepted as a fundamental right, especially by the developed nations for everyone, and a proper set of standards of living for advancement. (Article 11, Para. 1, Para. 2) (ICESCR, 1966). The United Nations Committee on (CESCR) defined the right to adequate food as; the “Right of every individual to have accessibility in terms of economic and physical, to food according to their requirement and availability of quantity and quality and free from chemical substances for healthy and secure living”.

Thus access to sufficient food of good quality is one of the internationally recognized basic human rights and the government are responsible to secure this important human right in the best possible way without any discrimination. Food insecurity results from complex interacting factors as these reasons can be seasonal or chronic but unequal distribution of food on the regional level, countries, households, and individuals are the consequence of poor governance and lack of institutional support. As in the world still, there is plenty of food but the poor are still food insecure. In addition, lack of income and access to adequate food is closely related to poverty and food insecurity. As poor have few assets to benefit from and they profit only from what they raise in the fields. In the agriculture sector with few effective mechanisms, the growth of crops can increase profit. Natural resources and transparent allocation of land rights require sustainable use of these resources. Poor people especially women have the right to access legal processes to maintain security over land is vital (DFID 2002).

Gender inequality and food insecurity are inter-linked in the context of food availability which further impacts gender-based differences in the status of health, education, and family. Women, children, and old age people are more vulnerable to food insecurity and face discrimination i.e. economically, educationally and other services (Agarwal, 2018). Food insecurity is a high-risk threat in Pakistan. Despite the surplus availability of food, 60 percent of the population faces food insecurity. Therefore, many poor people are unable to afford good quality and adequate quantity of food and its subsequent health consequences like stunted growth and diseases (Sleet, 2019).

In the national scenario, the state of food security for women is at its lowest ebb due to cultural constraints in their awareness and empowerment. The women of rural areas are major contributors to the process of food production. However, the state of their food security is unsatisfactory due to the availability and social inequality issues faced by them to access their required dietary needs. This research study is designed to highlight the state of food insecurity faced by women about the availability of food to them in a remotely located District (Tor Ghar).

Material and Method
The research study was carried out in District Torghar (Khandar Tehsil) with the purpose to define and conclude the link between food insecurity and the independent variable i.e. availability. The present study was conducted in three selected villages (Bilyani, Bimbal, and Dharo) of Tehsil khandar respectively, because of the severe condition of food insecurity in the area thus, 291 sample sizes were determined as per Sekeran (2003) criteria. The study respondents included the households head from each selected household. Additionally, the sample size was proportionally distributed to each strata using the proportional allocation method (Ullah et al., 2021).

The formula for proportional allocation is given in Equation-I.

\[
\text{n}_{i} = \frac{(n) \times N}{N_{i}} \text{……………….. (Equation-I)}
\]

A conceptual framework was designed with one independent variable (availability of food) and one dependent variable (food insecurity) as shown in Table 1. The study variables were measured on three levels of Likert scales with responses ranging from disagreeing to agreeing. Furthermore, Uni-variate
analysis was applied through percentage and frequency distribution and reflected in the tables. To test the associations between independent variables (availability of food) with the dependent variable (food insecurity) chi-square statistics were used (Kothari (2004). Chi-square values were calculated by using the formula given in equation-II and explained below (Ullah et al., 2021).

\[ \chi^2 = \sum \sum \frac{(O_{ij} - E_{ij})^2}{E_{ij}} \quad \text{……………… (Equation-II)} \]

| S.no | Independent variable | Dependent variable |
|------|----------------------|--------------------|
| 1.   | Availability of food | Food Insecurity    |

## Results and discussions

### Availability of Food

Availability is the main component of food security that pertains to the availability of all required food components to all masses in physical terms. Due to population growth and degradation of soils, agricultural production is not increasing at a pace with the growing population. Therefore food availability is a growing global issue. Responses on the perception of the respondents on food availability are given in Table 2 and explained below. The results in the table show that the majority (73.9 %) of respondents reported that the vegetables required for the daily meal were available in their homes. While (25.1%) of respondents disagreed with it. Vegetables are important daily food ingredients that are necessary for the growth and vitality of humans. The majority of respondents had this important food component available to them. However, almost one-fourth (25.1%) negate the availability of vegetables to them which is a threat to their food security. These findings are similar to Bangladesh Bank, (2014) report that the availability of food items has increased from 2004 to 2013. As the land released for major crops and productivity amplifies the food items. However, marginalized groups like females still face problems in the availability of vegetables.

The results further show that fruit was unavailable to 56.7% of respondents. Furthermore, 67% of respondents disagreed that the required quantity of meat was available to them, while 33% of the respondent the required quantity of meal was available to them. Similarly, 59.1% of respondents expressed those sufficient milk/dairy products for daily uses were not available to them, whereas; it was available to 40.9% of the respondents. In addition, 56.7% of respondents stated that dry fruit was not available at home for them to eat, and for 39.2% of respondents, the dry fruit was available for them at home to eat. These results project a bleak picture of the availability of some of the very basic food components like; fruit, meat, milk, and dry fruit to the respondents. The non-availability of these food components will surely affect their consumption and its subsequent negative repercussions on the health of the masses, especially the deprived groups like women. Several research studies pointed out the widening gap between food production and the growing population. These international studies report that the population growth of developing countries has surpassed all the aspects of agricultural production, including food production (Talukder et al., 2015; Hepburn, 2019). The UN, sustainable development goals have also pointed to this state of emergency and called for multilateral efforts to control population growth and enhance agricultural production (Hepburn, 2019). Therefore, the global population is at high risk of food insecurity due to imbalances in population growth and production systems (Malthus, 1789; Botero, 1588). Consequently, the population of developing countries, especially their marginalized groups like ethnic minorities and women are extremely vulnerable to low availability of food to them (UN, 2019).

With respect to the availability of reading to the respondents, the majority of them (73.9%) agreed that this important food commodity was available to them at home, while for 25.1% of respondents its availability was a problem. Bread is a staple food, especially in the south Asian region of the world. Most commonly it is consumed three times a day. Therefore, all efforts are made by the family head to ensure its availability to the family members. In extreme poverty, however, this important daily food intake

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ingredient is missed by the poor masses. Consequently, the poor societal components are at high risk of food security. Several international reports, therefore, emphasize improving the mechanism of food redistribution to improve its availability to needy people at low prices (UN, 1975; Napoli, 2010).

Table 2: Availability of Food

| S.no | Statement                                                                 | Agree  | Disagree | Don’t know |
|------|---------------------------------------------------------------------------|--------|----------|------------|
| 1.   | The vegetables required for a daily meal are available to you at home.    | 215(73.9) | 73(25.1) | 3(1)       |
| 2.   | The fruit required for the daily meal is available to you at home.         | 114(39.2) | 165(56.7) | 12(4.1)   |
| 3.   | The meat required for a daily meal is available to you at home.            | 96(33)    | 195(67)  | 0          |
| 4.   | You have sufficient milk/dairy products to feed you at home.               | 119(40.9) | 172(59.1) | 0          |
| 5.   | Availability of bread at home is not a problem for your family.            | 215(73.9) | 73(25.1)  | 3(1)       |
| 6.   | The dry fruits are available at home for you to eat.                       | 114(39.2) | 165(56.7) | 12(4.1)   |

* Number in the table represents frequencies and the number in parenthesis represents the percentage proportion of respondents.

Association between Food Availability and Food Insecurity

Food consumption primarily depends upon the presence of food commodities in local markets that are approachable to local communities. A person who has the opportunity of availability of food on their premises can opt for accessing, purchasing, and utilizing food. On the other side, the non-availability of items in required quantities to the masses can create a food crisis and expose them to food insecurity. The association between food availability and food insecurity is given in the table and explained below.

Results in the table show that non-availability of required vegetables for daily meals at home a highly significant (p=0.000) with food insecurity. Similarly, deficiencies of the required food in daily meals at home show a highly significant association with food insecurity. Moreover, insufficient availability of required meat in daily meals exhibited a highly significant association (p=0.000) with food insecurity. Food insecurity starts with the availability of the required quality and quantity of nutritious food for healthy living. Fruits, vegetables, and meat are some of the very basic food components that are required to meet the protein, starch, and vitamins related dietary needs of humans. The above result shows an unsatisfactory state of availability of these food components in regular food availability at the household level which led to a state of food insecurity among the community members evident from the highly significant association. A series of research studies linked food insecurity to the unavailability of the basic food components at household, community, regional and national levels due to administration, institutional and political failures. Other studies further added that the repercussions of the non-availability of food items are specifically harsh on marginalized groups like women ethnic minorities, children, and old age people from poor and lower (Smulders et al., 2013, Ishaq et al., 2018). Literacy, awareness, and good governance can help in approving the access of masses to required food commodities through its ensured availability. However, low awareness, the poor state of literacy, and adverse government policies constrained the marginalized group by reducing available items to them and exposing them to food insecurity (Abegaz, 2017, Habtezion, 2012).

The result further shows that insufficient availability of milk and dairy products at home exhibited a highly significant association (p=0.000) with food insecurity. Moreover, insufficient availability of bread to feed family members also shows a highly significant association (p=0.000) with food insecurity. In addition, a low intake of dry fruit at home also shows a highly significant association (p=0.000) with food insecurity. Bread, milk, and dry fruits are the other important food ingredients consumed by the human in their daily diet intake. Wheat constitutes the most important component of the daily diet in terms of...
quantity it provides the carbohydrates, starches, and glucose that are required for normal body function. Iron and zinc are additional trace elements that are supplied through the consumption of wheat in a routine diet. Milk and nuts are the basic sources of vitamins consumed on regular bases. The above results point to an insufficient state of accessibility to these basic dietary components that are subjective to the community members to food insecurity. These results are validated by (FAO, UNICEF, WHO, IFAD, and WFP, 2019) according to which more than one-third (1/3) of the population of developing countries suffer from food insecurity due to their limited access to their basic dietary needs. The insufficient access to food commodities is streamlined by the poor governess and poverty in association with each other. The patriarchal structure further deteriorates the institutional functions by depriving women of accessing their basic dietary needs under the cover of cultural, economic, and social inequalities (Ghanem, Smulders, FAO, 2008). Natural and manmade disasters are the additional factors that exposed marginalized groups like women and ethnic minorities to food insecurity by disrupting the process of food availability (Tandon et al., 2017). Food availability is the starting point for securing human beings from food insecurity. The political institutions, the administrative setup, and the production systems working in coordination secure the basic dietary needs of human beings through its availability. On the other side, the socio-economic status of the masses and their socio-cultural inequalities subject the poor and marginalized groups to consume an insufficient quantity of basic food ingredients and expose them to food insecurity. The natural and manmade hazards pose additional hindrances to reducing food availability as external factors. On the other side, poverty, illiteracy, and low state of awareness are conglomerate internal factors that restrict food availability to extremely vulnerable people and subject them to food insecurity.

Table 3: Association between Food Availability and Food Insecurity

| S. No | Statement                                                                 | Agree | Dis-agree | Total  | P-Value & Chi-square |
|-------|---------------------------------------------------------------------------|-------|-----------|--------|----------------------|
| 1     | The vegetables required for the daily meal are available to you at home.   |       |           |        |                      |
|       | Agree                                                                     | 27(9.3)| 149(51.2) | 176(60.5)| $x^2 = 117.402$      |
|       | Dis-agree                                                                 | 91(31.3)| 24(8.2)  | 115(39.5)| P= 0.000             |
|       | Neutral                                                                   | 0(0.0) | 0(0.0)    | 0(0.0)  |                      |
| 2     | The fruit required for the daily meal is available to you at home.         |       |           |        |                      |
|       | Agree                                                                     | 8(7.1) | 105(92.9) | 113(100)| $x^2 = 85.847$       |
|       | Dis-agree                                                                 | 110(61.8)| 68(32.2) | 178(100)| P= 0.000             |
|       | Neutral                                                                   | 0(0.0) | 0(0.0)    | 0(0.0)  |                      |
| 3     | The meat required for the daily meal is available to you at home.          |       |           |        |                      |
|       | Agree                                                                     | 0      | 98(100)   | 98(100)| $x^2 = 97.716$       |
|       | Dis-agree                                                                 | 118(60.5)| 77(39.5) | 195(100)| P= 0.000             |
|       | Neutral                                                                   | 0      | 0         | 0       |                      |
| 4     | You have sufficient milk/dairy products to feed you at home.               |       |           |        |                      |
|       | Agree                                                                     | 8(6.7) | 111(93.3) | 119(100)| $x^2 = 95.565$       |
|       | Dis-agree                                                                 | 110(64)| 62(36)    | 172(100)| P= .000              |
|       | Neutral                                                                   | 0      | 0         | 0       |                      |
| 5     | Availability of bread at home is not a problem for your family.            |       |           |        |                      |
|       | Agree                                                                     | 48(22.3)| 167(77.7) | 215(100)| $x^2 =113.497$       |
|       | Dis-agree                                                                 | 67(91.8)| 6(8.2)    | 73(100)| P= .000              |
|       | Neutral                                                                   | 0      | 0         | 0       |                      |
| 6     | The dry fruits are available at home for you to eat.                       |       |           |        |                      |
|       | Agree                                                                     | 7(6.1) | 107(93.9) | 114(100)| $x^2 = 92.916$       |
|       | Dis-agree                                                                 | 105(63.6)| 60(36.4) | 165(100)| P= .000              |
|       | Neutral                                                                   | 6(50)  | 6(50)     | 12(100) |                      |

* Values in the table represent frequencies and values in parenthesis represent the percentage proportion of respondents

Conclusions and Recommendation

There was an insufficient supply of basic food ingredients like wheat, vegetables, fruits, meat, milk, and nuts to the local community members at the household level. The causes of food unavailability are multi-
dimensional ranging from the problem of low awareness, poverty, and inequality to institutional and administrative failures to ensure sufficient food availability at the household level. The poor state of food availability exposed the community members to a high risk of food insecurity. Creating awareness among the masses to improve the knowledge of availability, accessibility, and better utilization of nutritious food in sufficient quantity and to avoid food insecurity by using mass media, social media, social campaigns, awareness raising drives, and interpersonal channels. Broadening the economic basis of income and employment generation to ensure the economic security of marginalized groups to sustain their living through improved availability, accessibility, and utilization of food according to the international standards of food security.

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