



**Abstract:** *The present study was conducted in light of a sociological perspective in the district of Torghar, Pakistan, to assess the household food security status through a perceptual research design. A sample size of 379 household heads was selected as per the proportional allocation method. A structured interview schedule encompassing all the study dynamics, such as independent (sociocultural determinants) and dependent (food security) variables, was analyzed through descriptive and inferential statistics. The study findings indicated that famine was a socially constructed phenomenon being sprouted under the shade of cultural traits encouraging eating, producing, distributing, and consuming patterns. The prevalent culture was highly capacitated with abilities for assimilation and acculturation. The leading stakeholders, both individuals and institutions should strive for channelizing the behavioral food patterns by inculcating the wastage and misuse along with equality in distribution amongst locals inhabitants by taking inputs from the religion and constitutional enlightenment.*

**Key Words:** Sociocultural, Torghar, Pakistan, Household Food Security,

## Introduction

Food security [FS] is a multifaceted and manifold paradox that includes social, biological, nutritional, and economic covers (Fronçilo, 1999). Food is not only concerned with the dietetic source but also plays numerous roles in social life and familiarly linked to culture and variation (Kittler et al., 2011; Mintz & Bois, 2002; Fieldhouse, 1995). Despite its multidimensional approaches, FS has been molded in a number of ways since its dawn; however, food security is transformed from macro (global and national) to macro-level to (household and individual) during the World Food Conference of (1974) as witnessed by (Maxwell, 1996). A number of definitions are floated; however, the most consensus which had an endorsement from World Food Summit (1996) is taken up as the operational definition (Gentilini, 2002). According to this definition, FS exists "when all people at all times have physical, economic and social access to sufficient, safe and nutritious food, essential for meeting their dietary needs and food preferences for an active and healthy life" (FAO, 2008).

It could be deduced from these definitions that FS is a carrying abroad concept and could not be reduced to just accessibility and production of food. Rather, it contains a comprehensive explanation

pertaining to food availability, food accessibility, food utilization and a stable mode of food supply (Gross et al., 1999; Peerzaa, 2004; Adeniyi et al., 2009). This is very much essential that FS must contain the appropriate quality of food in terms of domestic production/ import to be available to humans, free access to be enjoyed with unabated selection as per their choice ensured with adequate nutritional contents. All these dimensions are interrelated, and missing any one of the above could not be termed as people being food secure. Such deficiency of any of the above is tantamount to having negative impacts on national to household and individual levels. It is an integral part of development entailing the social protection with combination to all safety networks (Muhoyi et al., 2014; Altman et al., 2009) with consistent focus to design strategies as per seat national level (Jensen et al., 2011) to be further augmented by nutritional sovereignty (Sagar et al., 2004) which must possess the food purchasing power, preferences and food proper utilization (Bremner, 2012; Adeniyi et al., 2009).

Pakistan is a food surplus country but experiences high levels of food insecurity, mainly due to poor access. Most Pakistani households are unable to afford nutritious diets. Rates of

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malnutrition are alarmingly high. Close to half of Pakistani children are stunted, rates of wasting exceed emergency levels and micronutrient deficiencies are very common. Water sources are under significant strain as a result of an increasing population, water-intensive agriculture, and poor management. Climate change is likely to create further difficulties over the next several decades. Water quality is also poor, and the majority of the population does not have access to clean drinking water. As a result, water-related illnesses are one of the leading causes of disease and death [Future Direction International, 2020]. Pakistan ranks 88th out of the 107 countries assessed in the Global Hunger Index 2020. According to the State of Food Security and Nutrition in the World report for (2020), the prevalence of undernourishment in Pakistan is 12.3% and an estimated 26 million people in Pakistan are undernourished or food-insecure [Food Security and Nutrition in the World, 2020]. Keeping the above stock of literature, the present study was designed to assess the household food security status in the purview of sociocultural determinants schemes through quantitative research design, i.e., chi-square test statistics.

### Material and Methods

A cross-sectional-based study pertaining to time

horizon was conducted in district Torghar Northern Khyber Pukhtunkhwa Pakistan. As per [Human Development Index \(2017\)](#) Torghar had 0.217 HDI reported in the 2017 survey. In simple words, the district comes under the domain of *Very Low Human Development*. Respondents in the universe of the study live their life in rural areas and had no urban population inhabitant [Census Report of Pakistan, 2017]. A sample size of 379 household heads was set for the study as in the purview of Sekeran's (2003) criteria out of 26464 households. Further, the selected sample size was proportionally allocated to each stratum means each tehsil as shown below in table (2), through the formula given by [Bowley \(1996\)](#). APA norms for research were followed for interviewing the household head. Further, a well-organized and comprehensive interview schedule was designed to encompass all the study variables for the purpose of data collection. The survey was initiated and completed during the year 2020. Furthermore, the data was further coded into SPSS (26 version) for further analysis, i.e., descriptive and inferential statistics through the application of indexation of the dependent variable (FS) and cross-tabulated with all the attitudinal statements of independent variable [sociocultural factors] in terms of chi-square test statistics.

**Table 1.** Proportional Allocation of Sample size with Respective Tehsils

District Torghar		
Name of Tehsils	Household Head (N)	Sample Size (n)
Judba	14972	214
Khander	11492	165
Grand Total	26464	379

$$n_i = \frac{n}{N} * N_i \text{ Where } n = \text{Required sample size } N = \text{Population size } N_i = \text{Size of } i^{\text{th}} \text{ strata } n_i = \text{sample Size to be taken from } i^{\text{th}} \text{ strata}$$

### Results and Discussion

#### Perception of Sampled Respondents Regarding fs

Food availability is a leading concern as an issue of each individual and state across the globe with specific reference to developing countries. A socially and culturally viable way of obtaining food is recommended for every one. However, it has been noticed being passed through inadequacies in supply and nutritional deficiencies. It is a fundamental issue with some multidimensional ramification in the nation and require absolute policies to target it with some reliable outcomes towards its mitigation, which is still missing [Coleman-Jensen et al., 2011]. This issue has got further immense due to the rise in world population and undeniable climate change, rendering the production and storage capabilities ineffective [FAO, 2013]. A public and private sectors

collaboration is needed as vital to capture this issue at its earliest to ensure food provision to the needy segments, specifically the malnourished children [Nord et al., 2005].

Table 3. disclosed that 92.2 percent of the respondents viewed that an economic system free of any social exclusion could enhance the chance to securing more food without any fear of gaps, 7.4 percent of the respondents were disagreed with the statement. It can be deduced from this information that a free of the biased economic system, competitive and respecting merit could ensure the high production and a subsequent high life standard. Such a system usually entails the participation of all segments of society, thus all having equal access to resources services [Jenkins and Scalan, 2001]. Moreover, 54.9 percent of the sampled respondents

agreed that the population explosion in our area negatively disrupting the farm productivity, 45.1% were disagreed with the statement. These findings concluded that population growth among the societal level deteriorated the smooth and transparent availability of food to the locals. Moreover, it also intimated the absence of check and balance mechanism part of different stakeholders involved in it. These findings augmented the preceding's outcomes that a sound mechanism of social inclusion was not in prevalence in the study area. [Jenkins and Scalan \(2001\)](#) argued that an uptick in economic growth corresponds to GDP, which ensure an honorable way of consuming food having enough calories to nourish children and elderly women. The development of structural growth encompasses economic development and increased agricultural production. The global production growth if combined with such pace, would exert pressure on the agricultural production, which would be a challenging job to ensure food supply in quantitative and qualitative terms to human beings on earth within the times to come ([Newman, 2018](#); [Kipkoech et al., 2017](#); [Varis et al., 2017](#)).

In continuity to the above findings, a majority, i.e., 86.3 percent of the respondents, agreed that climate change is a threat to agricultural productivity in our area, whereas 13.7 percent rejected the said statement. These findings emanated the local vision regarding climate change and their resilience to cope was not enough to capture it with a traditional ways of farming. Some new and innovative approaches with strong endorsement on the part of government could easily entertain it through new strategies. These results were in line with [Hashmi et al. \(2021\)](#) who argued that climate change has resultantly impacted the yield productivity, which has also reduced their revenue and put the farmers in extreme economic vulnerabilities. Such a phenomenon is a complex whole of variations in temperature, seasonal variations, new varieties of seeds, etc.

The study further disclosed that 86.3% of the respondents agreed that if someone cannot purchase food with money as a sign of food insecurity, 13.7% negated the said statement. It could be concluded from these findings that in Pukhtun societal norm, the concept to arrange the food and other related necessities of life to the household is a duty of male members, failing to accomplish is treated with extreme share from the community for this particular male. Moreover, it could further divulge that a barter system had been in vague in the study area, involving low scale of money for purchasing food items.

Table 2 further divulged that 52% of the sampled respondents disagreed with the statement that class-based stratification in society generated food insecurity, and 48% of the respondents agreed that class-based stratification in society generated food insecurity. A complex set of interactions leading to interrelationship has been the virtue of a traditional society. In such like situation, individuals usually undergo certain own indigenous systems of creating each other needs. The data intimated that not a rigid stratification was invasive in the study area; however, the insecurity pertaining to food was prevalent. Such food insecurity could be attributed to some other factors like unawareness regarding the modern tendencies in agriculture, poverty, low literacy, etc. ([Gross and Rosenberger 2010](#)).

It was further obtained from table 2 that 50.7% of the respondents rejected that aged and senior citizens are more vulnerable to food insecurity, 49.3% were accepted the said statement that aged and senior citizens are more vulnerable to food insecurity. It could be deduced from this information that a strong family network was in existence where each and every member's needs were taken into consideration. The aged people were no more exception to it. These considerations have been rewired in the local culture by taking enshrinement from the religion Islam. However, [Ziliak & Gundersen \(2019\)](#); and [Strickhouse et al. \(2014\)](#) findings were in contradiction to these inferences where old aged low-income groups with low education were the primary victims of food insecurity.

Moreover, a majority 53.6%, of the respondents agreed that the existence of social safety nets (SSN) has ensured the availability of food inconsistent patterns to the local inhabitants, 46.4% were rejected the said statement. SSN plays a fundamental role in the distribution of food amongst the poor and destitute persons to avoid foreseen and unforeseen threats to survival and food insecurity. Islam made social safety nets have the characteristics of the distribution of wealth from the rich to the poor. This transition of wealth and goods ensures the circulation of resources, which enables each individual of the social system to take benefits out of it. The essentials of safety nets are various performances like food stamp schemes etc., with the sole aim of transition of commodities amongst communities ([Devereux et al. 2008](#)).

Likewise, 62% of the respondents were agreed that the barter system is a good example for ensuring food security in our area, whereas 38% of the respondents disclosed that the barter system is not a good example for ensuring FS in your area. Anyways and means to meet the rising food needs

with particular focus on poor livings prosperity to an area. Poor usually lacks the availability to purchase food items due to non-possession of money. A barter system, if prevails, were poor to sell their services and the resourcefulness to provide food may bring to the social system. This study also alluded to the existence of such a system in the area [Chandrasekharan, 2020].

The study further illustrated that 62% of the sampled respondents agreed that rising militancy and advanced weapons with the prevalence of poverty enhanced the occurrence of food insecurity; 38% negated the said statement. Militarization of politics has remained economic domains of life. It has been badly destroyed the growth initiatives with a bleak hope and uncertainty towards the survival of human beings. Furthermore, food insecurity also has been found as a harbinger of poverty [Birchler, 2017].

Table 2 further jibed that 50.7% of the respondents rejected the statement that a system based on lowest values with zero tolerance to corruption generates the chances of FS on a regular basis, whereas the remaining 49.3% were agreed that a system based on lowest values with zero tolerance to corruption generates the chances of food security on a regular basis. It is pertinent to mention that food production has increased across the globe, but still, food insecurity has been in vague. The existence of such food insecurity could be attributed to some other social and economic disarrays in the social system. Moreover, any system showing disdain to corruption and corrupt value may have the prevalence of food security to its members. The work of Escobar et al. (2009); and Onder, (2021) could be quoted as sound inferences with reference to these findings. Moreover, direct impacts of corruption on food insecurity, social injustice have also been identified as a factor responsible agent of food insecurity.

**Table 2.** Food Security [Dependent Variable]

Statements	Agree (%)	Disagree (%)
An economic system free of any social exclusion could enhance the chance to securing more food without any fear of gaps.	351(92.2)	28(7.4)
Population explosion in your area negatively disrupt farm productivity.	208(54.9)	171(45.1)
Climate change is a threat to agricultural productivity in your area?	327(86.3)	52(13.7)
If someone cannot purchase food with money as a sign of food insecurity.	327(86.3)	52(13.7)
Class-based stratification in society generated food insecurity.	182(48.0)	197(52.0)
Aged and senior citizens are more vulnerable to food insecurity	187(49.3)	192(50.7)
The existence of social safety nets have ensured the availability of food inconsistent patterns	203(53.6)	176(46.4)
A barter system is a good example for ensuring food security in your area	235(62.0)	144(38.0)
Rising militancy and advanced weapons with the prevalence of poverty enhanced the occurrence of food insecurity	235(62.0)	144(38.0)
A system based on the lowest values with zero tolerance to corruption generates the chances of food security on a regular basis.	187(49.3)	192(50.7)

### Association between Sociocultural Dynamics and FS

Cultural determinants are of immense importance as they reflect the different walks of life in terms of predictability in actions and thinking patterns. Such patterns entail the behavioural modes of consuming food and keeping oneself alive. Food consumption is not only intended to be consumed; rather, some other dimensions such as its growing, preserving, and marketing require conservation as human survival revolves around these. A variety of patterns, means, rules, and regulations have been implemented and revisited on a regular basis to promote innovation on long-term grounds [Olum et al., 2017; Keding et al., 2013]. Table 4.4.1 alluded to the fact that food security and sociocultural dynamics are indispensable as a highly significant

( $P=0.000$ ) association was detected between famine, a socially constructed disaster, and FS. This information is well-informed with regards to the social and cultural fabrics being driven from time to time to produce, distribute, and consume food on sustainable grounds in the community. A number of faulty and hollow structural determinants lacking the social and cultural participation of locals may end this phenomenon of hunger and famine. The social and cultural determinants included are shares in production for all segments working on the land, the barter system, and socially and culturally driven charity-based social nets. Understanding cultural dimensions pertaining to food security and requirements play an important role in ensuring the availability of a healthier diet to its members on a sustainable basis with a cultural endorsement to

sustain human survival [Maxwell et al., 2016; Kittler et al., 2011].

It was further ascertained from table 3 that people from diverse backgrounds eat different types of food so as to retain their cultural identity, which had a significant association ( $p=0.000$ ) with FS. These results inculcated that heterogeneity in food preferences had a positive relationship with cultural diversity as the immanent point of individual identity through the goggles of cultural perspectives. It could be deduced from these findings that socially transmitted food prescriptions (what should be eaten) are well defined and visible in cultural patterns of life under the strong influence of a particular and leading factor, i.e., religion. Moreover, the nature of eating and class/caste status-based identities could not also be ruled out, as Ghosh et al. [2009] pointed out that heterogeneity in food consumption on the basis of group relationships is attributable to food taboos and to social acceptance. Furthermore, these priorities change with physical health and demand as appropriate for individuals, such as during illness, pregnancy, and so on (Piperata, 2008). Additionally, a significant association ( $P=0.000$ ) was found between patriarchy and leading women being more vulnerable to food insecurity than males with FS. It is obvious from these results that a male was in the driving seat. He has to carry out all tasks, including food provision, for all family members, in return for enjoying all the powers, rights, and provisions in a leading way, including superiority in food access to female members. These results were also supported by Ruiters [2012] and Ruiz et al., [2019], who disclosed that the fragile status of women in a family while a higher grade of social standing for men created a social imbalance resulting in the malnutrition of girls. Willoughby and Gore [2018] disclose that in the context of patriarchal norms and social practices, women are the worst sufferers: they are usually asked to perform in agriculture with no pay in return while denying them in the economic and political domains of life, they are often exposed to social and physical violence. All such constraints make them vulnerable in most of South Africa's societies, albeit exposure to rape and limited access to eating in a proper way as well.

Furthermore, a highly significant association ( $P=0.000$ ) was found between how culture shapes how food is produced, consumed, and distributed with FS. It could be deduced from these findings that socially transmitted food prescribed and proscribed prescriptions, including food taboos, can affect social channels of accessibility to food and food choices. Such food-related dynamics are derivatives of the division based on variations in criteria, i.e., on the

basis of social status, dignity, or other health needs (Helman, 2007). In addition, these results were also consonant with the cultural traits explicitly explaining the mechanism of food security, either being traditional and restricted to a particular group of people or enjoying access to the holistic mainstreaming of a society in terms of food provision (Lambden et al., 2007). Furthermore, agricultural-based delimitation based on crop selection and the local environment adds to the uncertainty in providing food to locals (Amone, 2014; Renzaho and Mellor, 2010).

The study further dismantled a significant ( $P=0.001$ ) association between household head demise and household food distribution practices and FS. After death, the household head (bread owner) may disdain the smoothness of food for other family members. It is pertinent to note that Pakhtoon is a patriarchal society, and men do everything right from the inception of offspring to bringing them up and feeding them has been declared as a man's sole responsibility, along with protection outside the community. These findings had close intimacy to the conclusion of Hannnum et al [2012] that upon the death of a father, the continuity of food supply to children's lags in uncertainty in food may lead children to suffer from malnutrition and stunted growth (Shenk et al., 2013). Furthermore, a highly significant association ( $P=0.000$ ) was detected between feelings of shame restricting individuals to cash for food requirements and FS. It could be deduced from these findings that inferiority and shame have thwarted ordinary men in psychological terms. This shame of informing others about one's own inability to produce or acquire food and keeping it hidden from others places him in an environment of extreme distribution and social seclusion. Fessler [2007] and Budden [2009] have also alluded to these inabilities of individuals as the responsible factor for food insecurity in most parts of the world.

Table 3 also revealed a highly significant relationship ( $p=0.000$ ) between food waste as a result of food-related behaviours and FS. These findings intimated that people in the study area had been passing through the food wastage practise in one way or the other. Food waste deprives potential deserving people of their right to feed. These results were also in line with the preceding, along with the work of Kim and Lee [2020], that Korea as a nation has been leading in loss of food wastage, where policymakers are focusing on its immediate behavioural transformation. Furthermore, Italy is another country that has been identified as having these characteristics (Fanelli, 2019). Moreover, table 3 explored a highly significant ( $p=0.000$ )

association between leftover food waste and FS. These findings were similar to the outcomes of the preceding inferences and were also reported to be a denial to the deserving people (Fanelli, 2019). Likewise, a significant association ( $p=0.000$ ) was found between food security and leftover food is stored. It could be deduced from these findings that a cultural pattern of food preservation practices has been in vogue from area to area and situation to situation. However, its current practices indicate a long-term strategy to avoid hunger and uncertainty pertaining to food provision. These findings were in line with Chipungu et al., (2012), who concluded that processing and preservation of food is a cultural dynamic based on eating habits and personal usages, and waste food has been denoted with norms being exercised in public as cultural drives depending upon the nation's financial strength or otherwise (Evans et al., 2012), with special reference to industrialized nations, with special reference to industrialized nations (Blichfeldt al., 2015).

Consistent with the above, a highly significant ( $P=0.000$ ) association was elucidated between FS and social bonds are indispensable. It could be deduced from these findings that social bonds based on human relations and interaction or blood-based on social significance are the driving force towards the attainment of FS. Any society having a strong social network of relations may face starvation threats of lesser magnitude as a helping mechanism of striving, and care each ensures food security arrangements. In this regard, the role of social safety nets is essentially acknowledged publically. These

results were also in line with Hadley et al., (2007) who related food safety to social safety nets (Hadley et al., 2007), speaking of the allocation of resources on efficient grounds, which has undoubtedly addressed the vulnerable status of food insecure people (Diaz et al., 2002). However, social support and social capital may be threatened by egocentric considerations as respondents do refrain from asking members for support in general, whereas traditional fabrics peril having no mode of accepting changes (Koster & Leckie, 2014; Mertens et al., 2015; Nolin, 2012).

Furthermore, a significant ( $P=0.000$ ) association was found between if someone could not purchase food with money as a deviation signal of societal norms with FS. These inferences indicate that lacking the ability to purchase is not often endorsed as a social norm but rather deemed a shameful act, usually ending in a food-insecure environment. Women have been noticed as the worst sufferers in such situations where survival is often at stake in such an environment (Power et al., 2017). This agony can only be met through ensuring social inclusion, which may alter stigmatization and shame as the sole reasons for social marginalization (Mahajan et al., 200). However, some other factors, like food shopping and production, if not focused upon, may deteriorate smooth access to food (Gabrysch and Campbell, 2009), which has not been focused upon for a long time (King et al., 2009).

**Table 3.** Association between Sociocultural Dynamics and FS

Sociocultural Dynamics	Dependent Variable (Indexed)	Chisquare & P-value
Famine is a socially constructed disaster	Food security	$\chi^2=162.532$ ( $P=0.000$ )
People from diverse backgrounds eat different types of food so as to retain their cultural identity.	Food security	$\chi^2=168.807$ ( $P=0.000$ )
Patriarchy led women more vulnerable to food insecurity than male	Food security	$\chi^2=126.941$ ( $P=0.000$ )
Culture shapes how food is produced, consumed & distributed	Food security	$\chi^2=142.167$ ( $P=0.000$ )
Household head demise affects household food distribution practices	Food security	$\chi^2=14.993$ (.001)
The feeling of shame restricts individuals to cash for food requirements	Food security	$\chi^2=8.636$ ( $P=0.013$ )
Food wastage is an outcome of food-related behaviors	Food security	$\chi^2=8.433$ ( $P=0.015$ )
Leftover food is waste	Food security	$\chi^2=74.712$ ( $P=0.000$ )
Leftover food is stored	Food security	$\chi^2=104.143$ ( $P=0.000$ )

Food security and social bonds are indispensable	Food security	$\chi^2=77.732$ ( $P=0.000$ )
If someone cannot purchase food with money as a signal of deviation of societal norms	Food security	$\chi^2=112.942$ ( $P=0.000$ )

## Conclusion

With regards to sociocultural dynamics and food security, the study explored that famine was a socially constructed disaster; people from divorce backgrounds ate different types of food so as to retain their cultural identity, and patriarchy led women to be more vulnerable in terms of access to food. The culture was found to be a defining element in how food was produced, consumed, and distributed. Household head demise negatively affected household food distribution practices; feelings of shame restricted individuals' opting to buy food, as deemed cultural incest in the study area.

Furthermore, food wastage was an outcome of food-related behavior. The study findings indicated that famine was a socially constructed phenomenon being sprouted under the shade of cultural traits encouraging eating, producing, distributing, and consuming patterns. The prevalent culture was highly capacitated with abilities for assimilation and acculturation. The leading stakeholders, both individuals and institutions should strive for channelizing the behavioral food patterns by inculcating the wastage and misuse along with equality in distribution amongst locals inhabitants by taking inputs from the religion and constitutional enlightenment.

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