Assessment of Food Security and Its Implication on Urban Poor People in District Peshawar

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ARTICLE DETAILS

ABSTRACT

Purpose: This study was carried out to address the issue of food security and the factors affecting it in the semi-urban area of district Peshawar, Khyber Pakhtunkhwa, Pakistan. More specifically, the study reviewed the food security situation among urban poor households using their food expenditures patterns and further investigated its various dynamics.

Methodology: Data were collected with the help of interviewing techniques from randomly sampled 100 households in the Peshawar suburb. Household food security was assessed using the food security index adopted from Omonona (2007). Using the Omonona index, the threshold which differentiated the food secure from the food insecure households in the study area was Rs. 1500 per month (i.e., 2/3 of mean food expenditure).

Findings: The result legitimized using the Omonona food security index as a smart indicator in determining food security status at the household level.

Implications: To help the urban poor in improving the situation of food security efforts are needed to enhance awareness of food security by promoting education regarding livelihood strategies, self-sustainability programs, and the importance of proper diet.

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Introduction

Food security issues have gained importance over the last few decades as it is not just about having enough production available in the markets. Recently it stands for ensured and sufficient food consumption for every individual, globally as well as on household level and national level too. Initially, “food security” was used to discuss the country that whether they have enough food to meet dietary energy necessities or produce enough food to meet its population demand. But the availability of food in the economy does not guarantee access to food and eating only calories does not mean achieving a healthy life. When measuring food security at the household or national level,
it has to address food access. This was widely recognized by scholars, globally. Basically, there are four pillars of food security i.e., availability, accessibility, utilization, and sustainability. There are endless 200 definitions and 450 food safety indexes which are given by different scholars working in different organizations agricultural economists, and nutritional all have a different concept of food security but its recognized definition was presented by FAO (1983) that defined food security as “Ensure that everyone has physical and economic access to the basic food they need at all times.” (Battersby, 2012).

The World Food Summit (1996) Definition suggests access to food, availability, use of food, and stability is used nowadays worldwide. Chambers and Conway (1992), focus on coping strategies to prevent food insecurity. In short, food security has emerged as a social and political issue (Iorlamen et al., 2014). In 2004, the right to adequate food security was realized under the FAO council.

**Food Security**

Food security is an evasive concept Barrett (2010) defined as Limited or uncertain availability of nutritionally adequate and safe foods or limited or uncertain ability to acquire acceptable foods in socially acceptable ways.” (Titus & Adetokunbo, 2007).

**Pakistan Food Insecurity**

The issue of food security was not handled with much care which is reflected in various statements available in Pakistan from time to time. Few stated that Pakistan achieved food sustainability in the 1980s, (Bashir et al., 2007). Others were of the view that ‘despite the fact that Pakistan produces many exportable foods products but still out of thirteen million people 26 percent of its population is undernourished (FAO, 2008). These are mostly based and lived in Punjab with unexpectedly 70 percent of its lowliest population. To increase their lifespan standard, most of them are involved in deeds that are not so good and inappropriate from earning point of view. Such families suffer more from insecurity in food. Pakistan always neglects the issues of food security by focusing only on the production of goods and rural area status but not focusing on the consumption and affordability of goods to each Pakistanis household (Khan, et al., 2011; Asghar & Muhammad, 2013; Khan et al., 2018).

Pakistan Agricultural Services and Supplies Corporation (PASSCO) was founded in 1973 with the task of producing agricultural commodities with the help of new techniques, to ensure an easy supply of food at the country level, In 2006, 4.34 million tons of agrarian and eatables goods were supplied with such agencies (PASSCO and provincial food departments). In order to measure and assess the level of food security, the World Food Program (WFP) Pakistan took steps to explore the question of food security for rural Pakistan in 1986 and again in 2003. The final results concluded that a "state of food insecurity" dispersed in Pakistan.

The Benazir Income Support Program (BISP) and the Food Support Program (FSP) are two major social security schemes arranged by the Pakistan Government to improve food access among poor people. In 2009, BSP was launched to upturn the financial capacity of the poor. The Food Support Program (FSP) was launched in 2002-2003 with the intention of refining the living standards of a poor households. About 1.25 million underprivileged families received aid. Survey of Pakistan 2007-2008).

**Urban Household**

Food security is an issue fundamentally present in urban poor as well as rural areas poor populations, especially in the developed countries. Today, scholars refereed urbanization as the “Global Population bomb” (Liotta & Miskel, 2013; Buhaug & Urdal, 2012). Generally, the urban population, at 53.6 % in 2014, is estimated to rise to 67.2 % in the future most expect to be in 2050.
(UN, 2014), making countries shift their attention from the manufacture of a good to the intake of foods. Poor Countries also have a harmful impact due to increases in food prices (Alexandros, 2008)

OECD (2012) defined urbanization as “A process when large numbers of people living in relatively small areas, forming cities where people are lacking access to safe and healthy food in terms of physical, social or economically”. This situation in turn diminishes and stopped the growth of actual urban people (Bort et al; 2002).

In the definition of UN-Habitat, urban poor is termed as “slums “which consist of any households lacking access to water, sanitation, having small rooms to live and so on. Recent estimates suggest that in 2014 there were 881 million people living in slums and a figure expected to reach 2 billion by 2030.

**Urbanization and food availability**
Urbanization and availability of food are linked to the arrangement of food consumption and the supply of food. Increasing numbers of megapolis mean that people living in a location that is not suitable for the production of food commodities will need to have more food. Usually, all metropolitan area households are net purchasers of food, because they cannot produce food to nourish their families and are unable to endure their good lifestyle (FAO, 2008).

**Urbanization and Food Access**
In the old days when a majority of people used to live in rural areas where food was produced, physical food access was not a big issue. However, people migrating to urban areas have constrained their accessibility to food as their money income is less to fulfill all needs when purchased at full prices. Like urban inhabitants have to buy good quality food instead of generating their own food from their own means and capacity and thus become prey to price spears. So income plays a significant role in determining whether food can be acquired and cannot afford to buy food at high prices. (Steven et, al 2014).

**Urbanization and Food Utilization**
Urbanite growth can have a major effect on a household's food security status. As normally food is grown in a rural area, an urban area is paying high prices for food. Sometimes they have to adjust other expenses to fulfill the basic everyday requirements of the family. Poor urbanity may have compromised with the low food quality in addition to a lack of awareness regarding nutrients value that also makes them prey to food insecurity. As a result, poor families in the sub-urban area are at risk of catching many diseases as well. Feeding on low-quality processed food by urbanites due to low affordability and accessibility to quality food has been reported common among urban poor people (Abu Hatab et al., 2019; Tacoli, 2019)/

**Urbanization and Food Stability**
Finally, stability of food for urban people is essential as it may also help in becoming prey to food insecurity and it is because of unavailability of food and high prices spears, natural tragedy, relocation to an urban area by poor people only, to gain better occupation and remunerations which lead to urban paucity. Because of the high rate of urban poverty, many risks to food insecurity, financial limitations on food, and the obtainability of food are predictable to remain greater in metropolitan areas than in countryside areas but, diminishing risk of food security may help countries to become more developed (Walker et, al 2010).

**Significance of the study**
This present study was expected to help to sort out factors and problems related to an urban poor household resident in Peshawar Khyber Pakhtunkhwa. This study helped whether food
consumption is important for them or whether living and coping with city life is more important this study also tell that affordability, nutrition, or availability of food is important for urban poor people what are their views whether they are aware of food security all the pillars or they are only trying to feed their stomach.

The research is useful because it would not only assess the food security issues with food expenditure patterns of urban poor people but also observed the awareness of food security among them as fewer studies have been done on urban poor households.

**Statement of the Problem**
Food security is a composite term reflecting its supply, affordability, nutrition value, and sustainability for all. Occasionally, it has been focusing on different aspects in different countries. Advanced countries mostly see it in terms of nutrition value and obesity issues etc., while for less developed countries it marks not only a shortage of food supplies but common man’s inaccessibility due to low purchasing power, unemployment low incomes, and government aids schemes in a pursuit to address them. In developing countries like Pakistan, Bangladesh, and Nigeria the low purchasing power has been marked as a major concern for poor households in accessing food. Another important question is the unanimity on the tool to clearly determine the food security status of a household. Various organizations and researchers have measured it using diverse designs which occasionally blur the situation. As recently the economy has been transforming gradually from rural to urban, the present study tried to explore food security issues among poorer households living in the suburbs of the capital city of Khyber Pakhtunkhwa, Peshawar. It was further hypothesized that by living in an urban area poor people could face higher prices not only for food supplies but also for other needs such as water, electricity, transportation, schooling, health, etc. All these issues are highly integrated and amenable to research but the focus of this study remained on access to food through kitchen expenditure patterns in the study area. In this regard, the major aims of the study are discussed in the section below.

**The study objectives**
- To measure the household food security using a food security index.
- To suggest recommendations regarding the food security status of urban poor people based on findings of the study.

**Literature Review**

**Food Security**
Food security was highlighted as a significant question in the 1980s because of the food famine and accessibility problems that occurred in the 1970s. The UN declared it as the essential component for a good standard of living. As said earlier the first explanation was given by FAO. But Sen. A. (1981) changed the concept and opinion of food security and discuss it in terms of demand i.e., approachability of food to poor people, based on their right to feed. After Sen's work, some other indicators were introduced including ease of access to food in markets. The accessibility of food from markets to houses became a key concept worldwide.

(Maxwell 1996) Urban policy-makers don’t report food security as for them it means to debate about the restricted economical means

Ejaz. 2009, found for rural Pakistan area, out of f Pakistan's 120 districts (for rural areas), only 40 are food-proof districts, while 80 are food-proof. 38 districts in these food-insecure districts suffer from severe food insecurity. Only Sindh's position is good in food security status as compared to other districts.

As we are also concerned about urban food security issues, the research emphasized by (Ahmed et
(al; 2007) in Bangladesh shows that only 12 of the 18 experimented countries that were unindustrialized countries had greater food insecurity levels than rural areas, despite the fact that their metropolitan household earns more wages. Bates (1981) argued that urbanity could advantage of social security in developing countries. Therefore, urban and rural poor people did not use a penny from these policies, and poverty, and food insecurity prevailed in the area.

**Pakistan’s Food Security Situation**
In 2008, the Planning Commission of Pakistan took a step to overcome some food insecurity regions. BISP was formulated in 2008 with the allocation of Rs.34 billion, the programmer aimed to provide Rs.1,000 per month to those families whose earnings are less than Rs.6,000 who can’t afford the basic necessities of life. According to the Economic Survey of Pakistan 2014-15, the budget of the program increased from 1.76 million to 5.0 million after 2015. It has been also concluded that deficiency of food would increase manifold year after year in Pakistan which clearly portrays the food insecurity issue.

Pakistan Household Economic Survey collected data by implying the food energy intake (FEI) indicator, to be Rs. 637.54 per person as the estimated official poverty line of the economy. (Economic Survey of Pakistan 2015-16). MNFSR stands for Ministry of National Food Security and Research was established on 26th October 2011 for the attainment of maximum food security level.

According to the report presented (2009) by the WFP world food program, 45 districts of Pakistan are included in food-insecure regions, it was doubled in 2009 when compared to 2003 survey data i.e (from 16 to 35) which make the position clear than obviously, the food secure districts are becoming less in Pakistan i.e. from 34 percent to 20 percent.

The world food program also evaluated KP regions Almost 6.3 million people which cover half of the population of KP, were observed to have less food intake, most people with less food depletion are found in the Malakand division (58 % and FATA 46 %). Of the total 6.3 million food-insecure people only, 1.3 million are included as being food insecure.

About 42 million people in Pakistan have a scarce income to consume a proper diet. The government of Pakistan has started Family Farmers Support program; ii) Income Generation Support Program, and iii) Nutrition Support Program. National Zero Hunger Program. The focus of these programs is to achieve aims like upgraded procedures to produce food, better food distribution, system, reducing starvation in the economy. (Economic survey 2016-2017)

**Methodology**
The provincial capital Peshawar was selected as the universe for the present study due to the fact that lately, a large number of people have migrated from other areas to Peshawar with various aims. Moreover, unions council 48 and 42 were purposively selected from Town-II Peshawar for the purpose of data collection through a questionnaire and interview. Using the random sampling method technique, the selection of responding households was completed using the formula by (Yamane, 2014);

\[
n = \frac{N}{1 + Ne^2}
\]

Where;
- \(n\) = sample Size
- \(N\) = population size (191)
- \(e\) = error margin (0.05)

Having a 5 percent error margin, a sample size of 114 was derived out of the total 191 households. Details are provided in table 1;
Table 1 The Details of Sampled Households by number, in the Study Area

<table>
<thead>
<tr>
<th>Selected UC</th>
<th>Union Council</th>
<th>Total household</th>
<th>Sampled household</th>
</tr>
</thead>
<tbody>
<tr>
<td>Darmangai(48)</td>
<td>Darmangai I</td>
<td>129</td>
<td>75</td>
</tr>
<tr>
<td>Gari sher dad (42)</td>
<td>Pirbala</td>
<td>62</td>
<td>25</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>191</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Source: PBS census government of Pakistan (population and household detail from block to district level KP (Peshawar district) (2019)

Measurements of Food Security Status of Sampled Households

Theoretical Framework for Food Security Indexation

There are numerous methods mentioned in the literature to measure food insecurity, globally. This study uses the food insecurity index which was used by Omonona and Agoi. 2007 for the first time. It provided help to easily recognize the food secure from food-insecure households based on their food expenses. Zhou, et al (2019) used it to measure food insecurity incidence in Pakistan.

Omonona was of the view that measuring household food security at the household level is different from measuring the whole economy’s point of view. As food security at the household level means having access to food by their own means i.e., either by producing better or by generating more income by different means which show the ability of household the way they utilize their own resources to pursue their activities thus achieving better food security status.

While measuring per capita at the national level doesn’t ensure the accessibility of food to each citizen or each household. So here we take the food security at the household level as a subset of food security at the state level.

Thus, the household was divided into food secure and food insecure based on their per capita food expenditure which further investigated the factors socio-economic affecting food security/insecurity of a household in the area.

Omonona used this index to find the food insecurity incidence of the household as well concluded that ‘finding food insecure households from minimum required food expenditure is an important indicator of combating food insecurity status.

Further “the threshold of food security was defined on the criteria of a two-third of the mean per capita food expenditure of the total household’s expense”.

Omonona’s Food Security Index (adopted by this Study)

As discussed in the last sub-section, there were several indicators helping in finding whether a household is food secure or otherwise. The study adopted an indicator that was used by Omonona in 2007 and later on by Irolem R.K. 2014. The Index classifies a household's status into food secure and/or food insecure by measuring its food security by using the formula below;

\[
F_i = \frac{\text{per capita food expenditure for the } i\text{th household}}{2/3 \text{ mean per capita food expenditure of all household}}
\]

Where \(F_i\) = food security index

When \(F_i \geq 1\) => ith household is food secure

\(F_i < 1\) => ith household is food insecure.

According to Omonona “a household would be food secure if its food expenditure is proportionately greater than at least by two-thirds of the mean per capita food expenditure per month when compared to sampled households”. In this way, a food-insecure household is one that
on average lies below table 2 two-thirds of the total food expenditures of the sampled area.

<table>
<thead>
<tr>
<th>Study area</th>
<th>Food secure</th>
<th>Food insecure</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Darmangi</td>
<td>28</td>
<td>47</td>
<td>75</td>
</tr>
<tr>
<td>Pirbala</td>
<td>15</td>
<td>10</td>
<td>25</td>
</tr>
<tr>
<td>Total</td>
<td>43</td>
<td>57</td>
<td>100</td>
</tr>
</tbody>
</table>

### Results

**Food Security Index Analysis Results**

The food security status of households can be analyzed by using the food security index but keeping in mind, their mean per capita expenditure on food, but first, consider the expenditure on food items. i.e., the Average or mean per household was Rs.12953 and the maximum was Rs. 36000 with a standard deviation of Rs. 6866.37 per month.

<table>
<thead>
<tr>
<th>Expenditure (Rs)</th>
<th>Darmangi</th>
<th>Pirbala</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 10000</td>
<td>33</td>
<td>0</td>
<td>33</td>
</tr>
<tr>
<td>10000-20000</td>
<td>38</td>
<td>21</td>
<td>59</td>
</tr>
<tr>
<td>21000-30000</td>
<td>3</td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td>&gt; 30000</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

Table 3 presented the data summary on household spending on food and its effect on household food security. The result in table 4.10.1 that 33% of the households spent less than RS 10000 on food. Also, about 59% and 7% of the households spend between RS 10000 to RS 20000 and more than 20000 respectively on food items. However, only 1% of the sampled households in the study area spent above RS 30000 on food per month. The result showed the average food expenditure of the households to stand at RS 12953.

### Discussion

Food security is a severe problem prevailing in Pakistan and considered a top trending topic as well but unfortunately, academically less awareness exists about this problem. Though many programs were chalked-out in Pakistan on the policy level, to eradicate the problems little progress was seen practically in implementing them. Due to such carelessness and irresponsible perusal of such a sensitive issue, the situation is getting adverse currently.
Secondly, people eat what they want to eat without understanding the need for good quality and balanced food. As discussed earlier, production may not be the main issue in an agrarian economy of Pakistan but the purchasing power and access to food is an established problem due to poverty. It had been misconceived that poor people only belong to the rural areas but in this research, it was proved that urban poor are also suffering parallel to their rural counterparts. Occasionally more starved than the rural people who arranged to get food by keeping livestock or other natural sources found in forests for free. In urban areas, poor have to cope with many situations where due to fewer residential areas they can’t keep livestock or hunt etc. In cities, their concern for food choices has been grounded in compromise with the urban lifestyle.

Conclusion and Recommendation
The study also concluded that the food security index can be easily applied to see the food security status at the household level. This will also give information on food expenditure patterns and non-food expenditures. Moreover, based on this specific study, the following recommendation and commendation were made: Self-sustaining programs for the family should encourage reducing the expenditure on the food of a household. Not only people should ensure to have something on the table, a more advanced family who is able to produce an additional income from home consumption, even minor income, can earn extra income. Further research is also required because the result currently presented may not be the proper representation of food security keeping in view food expenditures. Therefore, extending this study to cover other union councils and areas may be necessary.

Reference


