

*Full Length Research Paper*

# Awareness about food security: An association of food security among internally displaced persons (IDPS)

Naveed Akbar and Bushra Shafi

Department of Rural Sociology, The University of Agriculture, Peshawar-Pakistan.

Accepted 22 July, 2017

## Abstract

This study aimed at finding the association of food security (dependent variable) with awareness about food security (independent variables). The study was conducted in ten Bhattai camp at Peshawar, Khyber Pakhtunkhwa. A sample size of 248 respondents was proportionally allocated to each of the ten Bhattai camps out of thirty five and then selected through sample random sampling techniques. Data was collected on carefully developed interview schedule covering both the study variables. Chi-square ( $\chi^2$ ) Statistics was used to test the association of the study variables. The association of food security was found significant with the knowledge about secure food ( $P=0.035$ ), awareness trainings regarding food security ( $P=0.050$ ), security is necessary for every country ( $P=0.048$ ), government is responsible for the provision of safe food ( $P=0.017$ ), food security is the basic need of citizens ( $P=0.021$ ), excessive storage of food can effect food security ( $P=0.032$ ), improper storage of food can destroy the food stuff ( $P=0.030$ ), knowledge about checking expiry date on food items ( $P=0.033$ ), knowledge about the procedure of safe food attainment ( $P=0.016$ ). Raising awareness through training sessions about food security, food distribution procedure, proper food storage, due process of the food attainment in the camp and its significance in healthy life were some of the recommendations in light of the study.

**Keywords:** Food security, awareness about food security.

## INTRODUCTION

Food security is the situation or state in which there is consistent access to adequate quantity of reasonable and nourishing food. Every day approximately 800 million people constantly live with hunger and food insecurity as their permanent acquaintance. Since the earliest commencement of human life, hunger and food insecurity is a permanent threat to the human livelihood and their survival. It is also a factor of severe physical and psychological distress lingered as an integral part of human experience and culture throughout the history (Anjum, 2010).

In spite of the growth in the yield of the staple crops, due

to the amalgamation of military intervention, natural disaster and economic uncertainty, Pakistan is facing a strident drop in terms of food security. In 2010, when the most horrible flood in decades immersed approximately one ratio of the entire country's area, it soured the situation of food insecurity in the country. In the consequences of the above mentioned flood, approximately 20 million people left deprived of access to basic food, safe water and health services, moreover it has also severely affected the infrastructure and agriculture sector of the country (WFP, 2012). During the period of 2003 to 2009 people with food insecurity inclined from 38 percent of entire population to 50 percent that is approximately 83 million people. Furthermore, it is predicted that on the account of consequences of the 2010 floods this figure has increased

further to 90 million people of the total population. The military intervention has further sour the situation of food insecurity by adversely affecting the country financial situation, extensive unemployment and a high inflation rate that almost touched 16 percent by the end of 2010 (WFP, 2012).

Approximately 80 percent that is two ratio third of the total population living in the rural areas faces severe situations of food insecurity, the people living there are most of them are poor. In Pakistan most of the mountainous areas have isolated societies, rough topography and environment delicateness has made the agriculture yield tough, furthermore, uneasy accessibility to the markets and services add more to the extensive long lasting poverty (IFAD, 2012).

Measuring of food insecurity at household level is the phenomenon that indicates any uncertain, inadequate or objectionable availability, accessibility or utilization of food stuff. This situation has been acknowledged as a result of the proximity of interconnected consequences. There is a solid justification for gauging the food insecurity on the basis of household level. Depending on the intra household apportionment of the capitals, it has the possibility for the peoples to be food secure in a food insecure household, similarly as there is a possibility for the peoples that is necessarily not to be poor in a household living in poverty. It can be concluded that we can gauge and reflect the number of individuals who are in food insecure household, not necessarily to consider the entire member of household food insecure. A household having one or more food insecure individuals, so that household will come in the category of food insecurity (Lee and Frongillo, 2001).

Food insecurity, poverty and health problems are closely interconnected with each other. Food security has a number of stages that is international, national, regional and household level. At any stage consistent supply in term of demand and even distribution of food are prerequisite conditions to food security. According to the survey conducted by United Nations World Food Program 62 percent that is 74 districts is food insecure in relation to availability and accessibility of the safe food. There are a number of factors effecting food security situation which are vary from to area to area, Pakistan is also vary with its socioeconomic situations. Impartial food security to the entire population residing in different areas of the country is indispensable for improved nutrition. Currently actions have been initiated by the government to ensure food security in terms of food stamps, subsidy on the wheat flour to the disadvantage population and distribution of food items to the primary girls school by United Nations World Food Program in specific district in collaboration with Ministry of Social and Welfare and Women Development under the project of Tawana Pakistan. In order to ensure food security of the common people determination needs to address the market driven demand and supply. Regardless of the

general availability of the food and variety of other means under nutrition have high prevalence in the Pakistan larger population. This high prevalence is because of high illiteracy rates, restricted coverage of the health care services, incidence of contraceptive consumption, socio-cultural dogmas and procedures, awareness among masses and other similar factors contributing to this issue (Kushel, 2006).

## MATERIALS AND METHODS

The study was carried out in Bhattai camp of union council Dagai, District Nowshera, Khyber pakhtunkhwa, Pakistan. The respondents of the study were the head of the household, a total of 665 households are residing in the selected ten bhatties's encampments (EPI BHU Dagai, Nowshera, 2016). From the population of 665, a sample of 248 respondents was selected randomly (Sekaran, 2003). The selected sample will be proportionally distributed to each bhattai camp by putting them on proportional allocation method (Cochran, 1977). A conceptual framework was devised comprising of two study variables i.e. food security (Dependent Variable) and awareness about food security (Independent Variable) (Table 1). For the measurement of study variables statement were pooled from the existing literature (10 statements including statements for availability, accessibility and utilization of secure food and 10 statements indicative of awareness about food security).

The respondents were interviewed by the researcher himself keeping in view APA standard of ethics. The dependent variable (food security among internally displaced persons IDPs) was indexed to get summary result for situation of food security in the study area.

The indexed dependent variable (Food Security among Internally Displaced Persons IDPs) was cross tabulated with independent variable (Awareness about Food Security) to measure the association among study variables. Chi-Square ( $\chi^2$ ) Statistics was used at 95% confidence interval to test the strength of association of variables at Bi-Variate Level. Statistical procedure outlined by Tai (1978) was adopted to calculate the value of Chi-Square ( $\chi^2$ ) Statistics through the formula as below:

$$\chi^2 = \sum_{i=1}^r \sum_{j=1}^c \frac{(O_{ij} - e_{ij})^2}{e_{ij}}$$

## RESULTS AND DISCUSSIONS

### Frequency and percentage distribution of respondents' regarding awareness about food security among internally displaced persons (IDPs).

From table 2, the results indicate that majority (58.1%) of the respondents was unaware from meaning of secure food,

**Table 1.** Conceptual framework.

Independent variable	Dependent variable
Awareness about food security	Food security

**Table 2.** Frequency and percentage distribution of respondents' awareness about food security.

S.No	Attributes	Yes	No	uncertain	Total
1	You know what a secure food means	89(35.9)	144(58.1)	15(6.0)	248(100)
2	You got any awareness trainings regarding food security, accessibility or utilization	91(36.7)	132(53.2)	25(10.1)	248(100)
3	Food security is necessary for every country	104(41.9)	138(55.7)	6(2.4)	248(100)
4	Government is responsible for the provision of safe food to the citizens	135(54.4)	103(41.6)	10(4.0)	248(100)
5	Food security is the basic need of citizens	101(40.7)	138(55.6)	9(3.7)	248(100)
6	Excessive storage of food can effect food security	101(40.7)	129(52)	18(7.3)	248(100)
7	Improper storage of food can the destroy the whole stock of food	110(44.4)	138(55.6)	00(0.0)	248(100)
8	You check expiry date on food items	103(41.5)	127(51.2)	18(7.3)	248(100)
9	You know how to attain safe food	94(37.9)	140(56.5)	14(5.6)	248(100)
10	You are aware from where you can get the food stuff	103(41.6)	139(56)	6(2.4)	248(100)

\*Values in the table present frequency while values in the parenthesis represent percentages proportion of the respondents.

35.9% of the respondents were knowledgeable about food security. Furthermore, 53.2% of the respondents did not received awareness trainings regarding food security while, 36.7% of the respondents have gone through some awareness sessions and trainings regarding food security, while, 10.1% of the respondents were uncertain about the statement. Similarly majority 55.7% of the respondents considered that food security is not necessary for every country, whereas, 41.9% of the respondents considered that food security is necessary. In a same way, majority 54.4% of the respondents considered that government is responsible to provide safe and secure food to citizens, while, 42.6% of the respondents considered government is not responsible for the supply of safe food. These findings are supported by Sana and Arsha (2012) that the big reason mentioned by the report of sustainable Development Policy Institute (SDPI) in collaboration with the World Food Program (WFP 2009) for food insecurity in rural areas of Pakistan is instability of Government Policies and international view of Pakistan. Moreover, majority 55.6% of the respondents considered food security is not the basic need of the people, while 40.1% of the respondents considered that food security is the basic need, while, 3.7% of the respondents were uncertain about food security as a basic need of the people. These findings of the study are supported by Farkhanda (2009) that Food security is recognized worldwide as a fundamental human right. By analyzing food security is accepted throughout the world as a fundamental human right.

Furthermore, majority 52% of the respondents considered that excessive storage of the food cannot affect food security, whereas, 40.7% of the respondents were of the view that excessive storage can effect food security, while, 7.3% of the respondents were uncertain about the statement. Similarly, majority 55.6% of the respondents argued that improper storage of food cannot destroy the stock of food, while, 44.4% of the respondents consider that improper storage of food can destroy the food stock. Likewise, majority 51.2% of the respondents did not aware to check the expiry date before using food stuff, whereas, 41.5% of the respondents were aware to check expiry date, further, 7.3% were uncertain whether to check expiry date or not. In the same way, majority 56.5% of the respondents were unaware of attaining their food, while, 37.9% of the respondents were aware of getting their food stuff and 5.6% of the respondents were uncertain about the statement. Moreover, majority 56% of the respondents was unaware of the place where they can get secure food, while 41.6% were aware and 2.4% were uncertain about the statement.

From Table 3, it is concluded that low level of awareness and knowledge about food security is predominant in study area. Majority of the people did not know that food security is basic need of the citizens and necessary for every country. Moreover, they had least information about the meaning of safe and secure food, proper storage, government responsibility regarding food security and that how and from where they can get secure

**Table 3.** Association between level awareness and food security N= 248.

Awareness about food security	Perception	Food security			Total	Chi-Square (P-Value)
		Yes	No	Uncertain		
Knowledge regarding secure food	Yes	78(59.1)	47(35.7)	7(5.3)	132(100.0)	$\chi^2=10.362$ (0.035)
	No	60(61.2)	35(35.7)	3(3.1)	98(100.0)	
	Uncertain	5(27.8)	13(72.2)	00(0.0)	18(100.0)	
Awareness trainings regarding food security, accessibility or utilization	Yes	75(58.1)	47(36.5)	7(5.4)	129(100.0)	$\chi^2=9.466$ (0.050)
	No	64(61.5)	37(35.6)	3(2.9)	104(100.0)	
	Uncertain	4(26.7)	11(73.3)	00(0.0)	15(100.0)	
Food security is necessary for every country	Yes	78(55.3)	53(37.6)	10(7.1)	141(100.0)	$\chi^2=9.562$ (0.048)
	No	65(61.3)	41(38.7)	00(0.0)	106(100.0)	
	Uncertain	00(0.0)	1(100.0)	00(0.0)	1(100.0)	
Government is responsible for the provision of safe food to the citizens	Yes	79(53.4)	59(39.9)	10(6.8)	148(100.0)	$\chi^2=8.157$ (0.017)
	No	64(64.0)	36(36.0)	00(0.0)	100(100.0)	
	Uncertain	00(0.0)	00(0.0)	00(0.0)	00(0.0)	
Food security is the basic need of citizens	Yes	79(54.5)	56(38.6)	10(6.9)	145(100.0)	$\chi^2=7.724$ (0.021)
	No	64(62.1)	39(37.9)	00(0.0)	103(100.0)	
	Uncertain	00(0.0)	00(0.0)	00(0.0)	00(0.0)	
Excessive storage of food can effect food security	Yes	73(57.9)	46(36.5)	7(5.6)	126(100.0)	$\chi^2=10.572$ (0.032)
	No	68(61.3)	40(36.0)	3(2.7)	111(100.0)	
	Uncertain	2(18.9)	9(81.8)	00(0.0)	11(100.0)	
Improper storage of food can the destroy the food stuff	Yes	72(57.6)	46(36.8)	7(5.6)	125(100.0)	$\chi^2=10.698$ (0.030)
	No	69(61.6)	40(35.7)	3(2.7)	112(100.0)	
	Uncertain	2(18.2)	9(81.8)	00(0.0)	11(100.0)	
Knowledge regarding checking expiry date of food stuff	Yes	74(58.7)	45(35.7)	7(5.6)	126(100.0)	$\chi^2=10.506$ (0.033)
	No	67(60.4)	41(36.9)	3(2.7)	111(100.0)	
	Uncertain	2(18.2)	9(81.8)	00(0.0)	11(100.0)	
Knowledge about food attainment in the camp	Yes	76(56.3)	50(37)	9(6.7)	135(100.0)	$\chi^2=12.258$ (0.016)
	No	66(60.6)	43(39.4)	00(0.0)	109(100.0)	
	Uncertain	1(25.0)	2(50.0)	1(25.0)	4(100.0)	
Knowledge about the procedure of getting the food stuff	Yes	77(56.2)	51(37.2)	9(6.6)	137(100.0)	$\chi^2=12.039$ (0.017)
	No	65(60.7)	42(39.3)	00(0.0)	107(100.0)	
	Uncertain	1(25.0)	2(50.0)	1(25.0)	4(100.0)	

\*Number in table represent frequencies and number in parenthesis represent percentage proportion of respondents and in the last columns number in the parenthesis represent P-Value.

food staff in the camp area.

#### **Association between awareness about food security and food security among Internally Displaced Persons (IDPs).**

A significance association ( $P=0.035$ ) was found between food security and the knowledge about food security. Similarly, a significant association ( $P=0.050$ ) was found between food security and awareness trainings and sessions regarding food security, accessibility or utilization. The frequency distribution of these results

make it evident that majority of the respondents were unaware about the meaning of food security which make them more vulnerable to food insecurity. People in the camp need awareness sessions and trainings to get knowledge about safe and secure food. These findings are supported by Kushel (2006) that high prevalence of food insecurity is because of high illiteracy rates, restricted coverage of the health care services, incidence of contraceptive consumption, socio-cultural dogmas and procedures, awareness among masses and other similar factors contributing to this issue A significant association ( $P=0.048$ ) is found between food security and food secur-

ity is necessary for every country. In the same way, a significant association ( $P=0.017$ ) was found between food security and government responsibility for the provision of safe food to the citizens. These findings supporting by Ahmad (2009) that many countries have constitutional provision to their citizens to ensure food and Pakistan is also of them which have intent to fight food insecurity. Similarly, in the constitution of Pakistan states that "it is the prior and core responsibility of the state to make possible the basic necessities i.e. education, food, clothing and medical care etc. A significant ( $P=0.021$ ) association was found between food security and food security is the basic need of the citizens. The frequency distribution of these results indicate that food security is important for every country and every person and it is the responsibility of the government to ensure food security for active and healthy life of the people.

A significance association ( $P=0.032$ ) was confirmed between food security and excessive storage of food can effect food security. Similarly, a significant association ( $P=0.030$ ) was found between food security and improper storage of food which can destroy the whole stock of food. In the same way, a significant association ( $P=0.033$ ) was explored between food security and checking expiry date on food items. The frequency distributions of these results indicate that excessive and improper storage can affect the food security in the camp. Furthermore, majority of the people in the camp were unaware of the expiry date on the food items. A significance association ( $P=0.016$ ) was found between food security and you know how to attain safe food in the camp. Similarly, a significant association ( $P=0.017$ ) was found between food security and you are aware from where you can get the food stuff in the camp. The results of these attributes in frequency distributions table also indicate that majority of the people in the camp were unaware of getting safe food in the camp and its procedure to attain the ration.

Poor knowledge and understanding of food security made it difficult for the people in the camp to properly utilize and access the available food in the camp. Most of them did not know the meaning of food security. They need awareness sessions and trainings to improve the

knowledge of food security for safe, active and healthy life.

## CONCLUSIONS AND RECOMMENADITIONS

It is concluded from the study that Internally Displaced Persons had low level of awareness about food security. They were not fully aware of attaining their food in the camp and safe food utilization that is proper storage and healthy food consumption. Therefore, majority people were food insecure, due to which the prevalence of diseases was high.

It is strongly recommended to conduct trainings and awareness campaigns about food security and its importance for active and healthy life, specifically for the people of affected areas.

## REFERENCES

- Ahmad, F. 2009. Food security in Pakistan. *Pak. J. Agri. Sci*, 46(2), 83-89.
- Anjum, F. M. 2010. Food Security In Pakistan. *Nutritional Security in India*, 3(7.0), 90.
- Bashir, M. K., Bajwa, Z. N., Bakhsh, K., Maqbool, A., & Chattha, M. W. A. 2007. Food security perspectives in Pakistan. In *Proceedings of the International Conference on Productivity and Growth in Agriculture: Strategies and Interventions* (p. 150). Faisalabad, Pakistan: University of Agriculture.
- Bashir, M. K., Schilizzi, S., & Pandit, R. 2012. *The determinants of rural household food security in the Punjab, Pakistan: an econometric analysis* (No. 122526).
- Farkhanda, A., Nazir, F., Maann, A. A., & Tasleem, S. 2009. Household food security situation in slum areas of Faisalabad. *Pak. J. Agri. Sci*, 46, 148-152.
- Kushel, M. B., Gupta, R., Gee, L., & Haas, J. S. 2006. Housing instability and food insecurity as barriers to health care among low-income Americans. *Journal of General Internal Medicine*, 21(1), 71-77.
- World Food Program. 2009. World Hunger Series: Hunger and Health. United Nations World Food Program.