

Factors Affecting Food Security Situation in Rural Household of District Faisalabad

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Abstract

Food is a basic and daily need for growth. The right of entry to food is an essential demand for a human right. The concept of household food security is the application at family level, with individuals within the house. Many factors income, age and education eating pattern have deep effects the household's food security situation. Main objective of the study was investigating the factors affecting food security situation in district Faisalabad. Multistage sampling technique was used for sample section. At the first stage one tehsil was selected randomly and three Union Councils were taken from each tehsil through situation simple random sample technique. At the third stage, two villages were selected randomly and from each village 15 heads of the house were selected through systematic random sampling. The total sample size of respondent was 180. Data was collected through well designed interview schedule. About 71.1 percent of respondents belonged to security situation a vast (72.8) majority claimed natural and energy crises was a main cause of food insecurity about 50% respondent farming occupation and about 63% of respondent did not satisfied with their food suggested good salary will be helpful to maintaining better food security situation.

INTRODUCTION

Pakistan is unindustrialized country where agriculture is its most important sector because it's major commitment of providing healthy food for fast growing population. Although the rate of population increases has considerably decelerated down from over 30% in 1980s to 2.09% in 2009-14, it is still deliberately high. Currently, Pakistan is 6th most populated country of the world and with the current rate of population growth, the population is estimated to get doubled by 2050 making Pakistan 4th largest nation in world ranking (Government of Pakistan, 2010). The nation which has no capacity to create the required quality food amount and has fewer assets to purchase from the worldwide business sector to addressing its needs is not nourishment sovereign state (pinstrup-Andersen, 2009). Pakistan is a developing country with an average per capita income of \$ 1254 per annum. Its economy is heavily dependent on agriculture that contributes nearly 21% to its domestic income (GDP) and 45% of its labor force (GOP, 2011). It also supplies raw material to textile industries, the biggest industrial sub-sector

of the economy. More than 63% of nation's populace lives in country regions and is specifically or by implication reliant on agriculture for its livelihood (Government of Pakistan, 2011). Pakistan has made significant progress towards food sufficiency since its independence in 1947. This is proved by the FAO's (2011) statistics. For the year 2008, Pakistan is one of the world's important manufacturers of various agricultural products. Despite this, 26% of the population is undernourished (FAO, 2011). Punjab is the largest province, population wise, of the country. It is the home to more than 73 million people i.e. 55% of Pakistan's population (GOP, 1998). The agricultural sector of the province has the biggest part in the country's agricultural GDP i.e. 57%. More than 70% of the families are landless in the province. To earn their livelihood, they are mostly engaged in informal activities (Anwar *et al.*, 2004). Pakistan's economy is the 26th biggest economy of the world and one of the world's driving makers of numerous horticultural products. In any case, the extent of the undernourished populace in Pakistan is too high i.e. 26 percent (FAO, 2011).

The World Food Summit of 1996 characterized nourishment security as "when all individuals at all times have admittance to fundamental, protected, helpful sustenance to keep up a solid and enthusiastic life" (World Health Organization, 2014). In contrast, Pakistan achieved food self-reliance in the 1980s (Gera, 2004) and maintains its status of food self-sufficient country (Bashir *et al.*, 2007; and 2012). And having the status of food self-sufficiency, 26% of the population is undernourished (FAO, 2010). During the month of October 16, 2012, the senate was conversant that overall in Pakistan 58% people suffered from food insecurity. Wheat is a attach diet and comprises 60% of the everyday food of general people. It includes calories, vitamins and minerals which have a huge dietary rate and consequently is the significant food crop in the planet. Pakistan being an agricultural country is believed to be self-sufficient in the production of wheat and not only that but also be in position to have considerable surplus for export to the other food-deficient countries. Although a closer appear in pattern of wheat production in the country reveals that barring a few years, the production of wheat has been much below the utilization level and Pakistan has been importing wheat to complete its needs. Apart from crop failure, droughts and weather related debilitating factors, unimaginative and wrong policies from the government have also played a major role in our drift towards a food-deficient country (Ashraf, 2013)

Food security is a multifaceted phenomenon affected by various factors. These factors can differ in their significance across countries, regions and time. Different variables have impact on food security including agronomic, institutional, political components, notwithstanding climatic elements. Environmental change is viewed as the most significant component affecting food security. Food security incorporates diverse measurements, specifically creation, dissemination and openness. Considering food creation measurement, the studies show generous effect of temperature and precipitation on food generation (Mahmood, 2012). In developing countries there are many difficulties in the way of achieving food security so Pakistan has high value of poverty and to abolish the poverty is the most powerful instrument to get better condition of food security that can be attain by sustainable economic improvement. Pakistan faced much disaster like floods and droughts such as recent grain production mostly effected. Government of Pakistan import major quantities food items to fulfill the shortages. Northern area of Pakistan different demographical and nutritional surveys indicates that condition of nutrition in women and children are very poor in these areas. According to

the research present problem of Pakistan nutritional, micronutrient, low weight birth, also iodine, iron disorder and vitamin-A deficiency. This create alarming situation in Pakistan and should control government health care institute by increasing women's income directly linked with each other (Smith *et al*, 2000). Pakistan 's food security situation is alarming because 103 districts in Pakistan are deficient in availability of food and 31 districts are surplus and 10 are sufficient in availability of food. Twenty-one districts in Punjab and 22 districts in Baluchistan are extremely deficient districts while the Sindh shows balancing picture of food security. According to the FAO, 58% population of the country is food insecure, However, the interesting fact is that extremely food insecure population are decrease from 2009 level to 2013 but overall it is increased from 2009 to 2013 which was 46% to 58%, respectively. Overall state of food security shows that only 27.1% of population in Pakistan adequate and 14% are borderline, 35% are moderate deficit and 20% are very or extreme deficit (Asif, 2013). The objectives of this study were to find out the socio-economic characteristics of respondents, identify and analyze the factor associate with food security situation, find out the domestic level food security situation and suggest some policy to control these risk factors and food security situation.

Bickel *et al.* (2000) the issues of preference and acceptability of food on part of the consumers are also considered as key factors in this regard. If the ability to acquire food, which has consumers' preference and social acceptance, is uncertain and/or unacceptable then the situation may be termed as food insecure. Brown (2004) reported that as the main foundation for rural livelihoods and agricultural production, terra firma is at the center of the confront of causes a Green Revolution as well as being paid agriculture affecting for poverty reduction and food security in Africa, it can be without difficulty used as an asset. For social and regional disintegration or integration, as can be demonstrate by many illustrations across Africa. As a result, security of and access to, land rights are prime anxieties for strategies and policies focus on reducing poverty and food insecurity. Feleke *et al.* (2005) discussed domestic level food security in the rural household of Ethiopia. While, analyzing the other factors like farm size, livestock ownership, household size and per-capita income, he discussed the association between food security and technology adoption and concluded that the utilization of modern technology do increase the food security. World food program (2006) found that lower school attendance also limited the ability to perform in the school and effects efficiency. Education is more important in children mental growth. There are large number of family who faced the high cost of food insecurity to send their children in school because that could earn and provide reasonably food for household members. The recently published report on "Hunger and Learning" focused on low-income families in rural areas of Pakistan. Hussain and Mudasser (2007) evaluate the effect of environmental modification on food security in Swat and Chitral districts of Pakistan and increases and decreases of temperature influenced the yield production. And impact carbon dioxide on wheat quantity in Punjab and how rain-fall and temperature effects the rain-fed and irrigation areas of Pakistan. Arif (2008) communicated that the food security exists when all individuals, always, have physical, social and budgetary access to adequate, protected and nutritious nourishment which meets their dietary needs and bolster incline for a dynamic and solid life. Family sustenance security is the utilization of this idea to the family level, with people inside families as the center of concern, and sustenance unreliability exists when individuals don't have sufficient physical, social or financial

access to nourishment as characterized previously. Staaz, *et al.* (2009) links the physical accessibility of food and financial power. The farmer should provide effective pricing and trade policies to avail and access food at requiring little to no effort. Nourishment security can be guaranteed by own generation and buying force. Ahmad and Farooq (2010) noticed that in Pakistan, 68% of the populace wins their work from agribusiness area. Domesticated animals and yields sub-parts contribute up to 28% and 24% towards rustic family unit's general salary, individually. The non-homestead ventures, wages and administrations, settlements and different sources contribute 20%, 18%, 70%, and 3%, individually. Anila and Adiq (2011) examined the indicators that effect the food security situation in Pakistan. One out of five is demographic indicator that effect on food security. The indicators included" employment status, place of residence, dependency ratio, education and income level of households. Educational level (intermediate level) and income significantly effects the food security. Need to implement some policies and programs to addresses these factors. Bashir *et al.* (2012) the study is one of the initial studies to rank the factors for their relative importance with food security. Educational level of intermediate was at the top of the list followed in order by educational level of middle and monthly income. Similarly, a negative impact ranks were also created and household size was at the top of this list followed by the age of household head. The ranking of the factors for their relative importance to food security provides an important 'to do list' to the government and policy makers to improve household food security. Ali and Khan (2013) discussed the effect of livestock ownership on food security situation in rural area of Pakistan. Three main rice-wheat districts Gujranwala, Sheikhpura and Hafizabad were selected to collect data. The study found that the people having livestock ownership had high level of food security as compared to those having no livestock ownership. Zia-ullah and Akhtar (2014) studied the main factor effecting demand and utilization of food in the world and Pakistan food security situation had been reported to highlights the causes of this situation. There should be need some policies to serve humanity and eradicating the poverty and hunger in Pakistan's rural areas. Climate change, rapid increase in population had deep effects on food security situation in rural areas of Pakistan. It is essential to use technologies to develop and increased the production of quality food to fulfill the present demand food. Sadiq *et al* (2015) About two-thirds of rural households in Nigeria are engaged in crop and livestock production as their main source of livelihood with most of these households vulnerable to food security and poverty. Results of the analysis of the FGT model showed that 36.6 percent of the farming households were poor. Based on the indices of the poverty depth, poor farmers required N 39.86 to escape poverty. Since livelihood status remained below the required levels for large parts of the rural populace during this research, identified poor households.

METHODOLOGY

Cross-sectional survey was carried out in this study for conducting interview with the respondents. This study was conducted in the rural area Faisalabad of Punjab, Pakistan. At the first stage one tehsils was selected randomly and the three union councils were taken from each tehsil through simple random sample technique. At the third stage, two villages were selected randomly from each Union Council and from each village 15 head of the household were selected through systematic randomly. The total sample size of household will be 180. Face-to-face method was used, where an immediate

feed-back was received from the respondents. It is superior to other methods of data collection for describing and reflecting the actual behavior in certain situation. The data was analyzed using descriptive and inferential statistics (Techniques of analysis).

A comprehensive questionnaire was prepared in the light of research objectives and pretesting of the questionnaire on 10 household was carried out to examine the suitability, workability and sensitivity of the measuring instruments. Field work activities such as conducting interview with the respondents were carried out by the researcher. Care in conducting interview was exercised keeping in view the social and cultural norms of the selected area (Bryman and Bell, 2007).

RESULT AND DISCUSSION

Table 1 shows that according to survey, 57.2% food security is due to smuggling of food, 51.7% is due to inflation and 62.8% is due to increase in food prices. The lowest percentage of food security was observed due to gender discrimination which is 26.7%. Chatterjee (1998) argued that the low purchasing power is most important cause of food insecurity. Our studies show that 64.4% food insecurity is due to government policies (Table 2). Ram and stump (2004) emphasized on food security and nutrient security, by saying that policy maker should aware of all inside household access to food and non-food inputs. Table 3 shows that 85% of food insecurity is due to low budget, 74.4% is due to low status at household level and at lowest rate, 55% food insecurity is due to management policies. Saad (2004) investigated about the insufficiency of calories and nutrients in the body. By the lack of sufficient calories and nutrients results in slowing down body metabolism and increase the demand of nutrients. And, if polluted food is supplied, diseases comes and death occurs even in childhood. Table 4 shows that 131% food insecurity is due to natural crises. Chi-square assessment (15.019) shows that there is a great connection between natural crises and food security situation. It means that natural crises badly impact the food security situation so hypothesis accepted. Table 5 shows that 52.5% food security situation is associated with gender discrimination. Table 6 shows that 55.5% food security situation is associated with energy crises. The present study reveals that smuggling of food, gender discrimination, inadequate supply of food, low agriculture productivity, low purchasing power, lack of storage facilities, inflation, less awareness and increasing prices are the main factors which affect the food security situations.

CONCLUSION

Main objective of this study was to determine factors that affect the food security situation. Many factors i.e. income, age, education and eating pattern have deep effects on the household's food security situation. According to our survey, low budget, smuggling of food, inflation and poor management policies are responsible for the food security situation. By improving budget, literacy and management policies, we can fight with food insecurity.

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Table 1: Distribution of the respondents according to their causes of food security situation.

Causes of food insecurity	To great extent		To some extent		Not at all		Mean	Std. Deviation
	Freq.	%	Freq.	%	Freq.	%		
Smuggling of food	103	57.2	65	36.1	12	6.7	1.49	0.621
Gender discrimination	48	26.7	78	43.3	54	30.0	2.03	0.754
Inadequate supply of food	63	35.0	80	44.4	37	20.6	1.86	0.733
Low agriculture productivity	75	41.7	75	41.7	30	16.6	1.75	0.724
Low purchasing power	86	47.8	77	42.8	17	9.4	1.62	0.654
Lack of storage facilities	78	43.3	71	39.4	31	17.2	1.74	0.735
Inflation	93	51.7	70	38.9	17	9.4	1.58	0.660
Less awareness	76	42.2	84	46.7	20	11.1	1.69	0.663
Increasing price	113	62.8	46	25.6	21	11.7	1.49	0.697

Table 2: Distribution of the respondents according to their government responsible for these reasons of food insecurity.

Government responsible for these reasons of food insecurity	Frequency	Valid Percent
To great extent	116	64.4
To some extent	63	35.0
Not at all	1	.6
Total	180	100.0

Table 3: Distribution of the respondents according factors affects the food security situation.

Factors	Agree		Disagree		Strongly Disagree		Mean	Std. dev.
	Freq.	%	Freq.	%	Freq.	%		
Low Budget	153	85.0	25	13.9	2	1.1	1.16	0.398
Gender Inequality	104	57.8	71	39.4	5	2.8	1.45	0.552
Low status	134	74.4	38	21.1	8	4.4	1.30	0.548

Less resources availability	113	73.9	39	21.7	8	4.4	1.31	0.550
No training facilities	100	55.6	70	38.9	10	5.6	1.50	0.603
No management policies	99	55.0	69	38.3	12	6.7	1.52	0.621

Table 4: Association between natural crises and the impact on food security situation.

	Impact of natural crises on food security situation			Total
	To great extent	To some extent	Not at all	
Agree	75	50	6	131
	81.3%	10.0%	8.8%	100.0%
Disagree	23	17	1	41
	65.0%	22.5%	12.5%	100.0%
Strongly disagree	0	8	0	8
	76.0%	12.0%	12.0%	100.0%
Total	98	75	7	180
	54.4%	41.6%	4.0%	100.0%

Chi-square – 12.178; df – 4; Sig. – 0.001

Table 5: Association between gender discrimination and their impact of food security situation.

Gender discrimination	Gender discrimination on food security situation			Total
	To great extent	To some extent	Not at all	
To some extent	25	20	3	48
	52.0%	41.6%	6.4%	100%
To great extent	41	33	4	78
	52.5%	42.3%	5.12%	100%
Not at all	32	22	0	54
	59.3%	40.7%	0.0%	100%
Total	98	75	7	180
	54.4%	41.6%	4.0%	100%

Chi-square – 3.445; df – 4; $P \leq 0.006^{**}$; Gamma – 118

Table 6: Association between energy crises and the impact on food security situation.

Energy crises	Impact of energy crises on food security situation			Total
	To great extent	To some extent	Not at all	
Agree	88	64	7	159
	55.5%	40.2%	4.4%	100%
Dis-agree	8	11	0	19
	42.1%	57.8%	0.0%	100%
Strongly dis-agree	2	0	0	2
	100.0%	0.0%	0.0%	100%
Total	98	75	7	180
	54.4%	41.6%	4.0%	100%

Chi-Square – 4.533; df – 4; $P \leq 0.0^{***}$; Gamma – 0.089