

Effect of Socio-Economic Characteristics on Food Security of Small Scale Farmers in Rawalpindi

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About half of the population in Pakistan is food insecure. The study focused the food secure population and the strategies for reducing poverty in district Rawalpindi. The study was carried out in district Rawalpindi in the Punjab province of Pakistan. Simple random sampling technique was used for this research study in district Rawalpindi. A sample of 120 respondents was selected. Then the data was analyzed through SPSS. It was concluded that majority people have low income, high food expenditures, low educational level affecting food security and government policies were not satisfactory to ensure food security. Moreover significant associations were found between education and food security and food security with the government policies. It was experienced that the more the people were educated were food secure.

Keywords: Expenditure, Food Security, Policies, Poverty

1. Introduction

Food is the fundamental requirement of humans because food security is important for healthy individuals, for their freedom and respectable livelihood between the societies of countries throughout the world. A starving country, in no state of admiration and regard, can never sustain its freedom. For achieving primary goal of stability of a political government, it is very essential to realize the importance of food security in the country. No sensible nations tolerate food insecurity particularly in the face of mounting population pressure which leads to further widening of already existing disparities. Furthermore, it can lead to conflicts; create chaos and tyranny among the people. Primary goal of every nation is to fight against hunger (Ahmed, 2009). It is widely believed that country's agriculture must maintain a high growth rate in order to ensure a rapid growth of national income, attaining macroeconomic stability, effective employment of growing labor force, improving distributive justice, enhancing food security, and a reduction in rural poverty in Pakistan (Mellor, 1988; Naqvi et. al., 1992 and 1994).

According to WHO (1996) definition of food security "all people have access at all times to sufficient, safe, nutritious food to maintain a healthy and active life". Usually, the concept of food security included both physical and economic access to food

that meets people's dietary needs as well as their food preferences. Food security is built on three pillars i.e. availability, access and utilization of food. Another view is access to balanced and best nutrition for everybody. Food access is openly linked with provision of foodstuff, therefore, food security rely on a balanced and healthy food scheme. It included: production, dispensation, sharing, promotion, gaining, and utilization of food (Anonymous, 2012).

Lack of food is becoming an invasive hazard as well as food insecurity a stable threat. Majority of Pakistan's population is food insecure, weak and emaciated. For individuals who are surviving on less than a dollar a day, a meal is just a piece of bread or made up of wheat flour (Chapati¹) with a cup of tea, or maybe an onion or chilies. Yet the middle class cannot have enough money to have meat daily, and homemakers are pushed to map healthy diet on harshly forced budget (Saeed, 2013). The increase in extremely food insecure districts depicts an alarming situation, where people could not be able to meet their requirements adequately (Suleri and Haq, 2009).

Meaningful long-term alleviation to hunger is rooted in the alleviation of poverty, as poverty leads to hunger. World hunger is a terrible symptom of world poverty. If efforts are only directed at

¹. Made up with wheat flour also locally called as (Naan)



Abstract

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providing food, or improving food production or distribution, then the structural root causes that create hunger, poverty and dependency would still remain. So constant attempts are needed to deploy capital and energies to alleviate food shortage and political solutions as well (Shah, 2010). Food insecurity in Pakistan is a product of poverty and inadequate food availability (Arif, 2007).

Although most persons living in poverty are at risk of food insecurity, it cannot be assumed that they are, in fact, food insecure. In addition, for many reasons, including factors such as ill health, disability, sudden job loss, and high living expenses, persons above the poverty line cannot be assumed to be food secure. The relationship between poverty, food insecurity and hunger is a complex one. There is no one-to-one correspondence between income-based measures of poverty and food insecurity (Vichealth, 2004).

Improved food security is important for global reduction of hunger and poverty, and for economic development. In 2000, world leaders committed themselves to the millennium development goals (MDGs) and one aim of the MDGs is to eradicate poverty and hunger, including "to reduce by half the proportion of people who suffer from hunger" between 1990 and 2015. Currently, 820 million people are affected by hunger in developing countries and the numbers of hungry people in the world is growing at a rate of four million a year; and the trend is not falling quickly enough to achieve the goal particularly in Africa and Southern Asia (Parliament, 2006). The draft of National Food and Nutrition Security Policy (NF&NSP), intending to counter food insecurity in the country and with the objective to reduce the current food insecurity situation by 50 per cent by 2030, has been finalized (Anonymous, 2013).

2. Materials and methods

This research was conducted in selected areas of Rawalpindi district and survey method was used for data collection. Focus of the research was to investigate the poverty reduction situation and food security. Two villages (Sagori and Mohra Bhattan) were selected from the rural areas of Rawalpindi using simple random sampling technique. The respondents in the present study were 120 males, including farmers, labors and common man. Simple random sample technique was utilized to select the respondents.

The major technique used for data collection was interview schedule. Close ended questions were asked. It was pre-tested before collecting the actual data to check the reliability of the interview schedule. The data collected was analyzed through descriptive

and inferential statistics. It includes frequency distribution, Chi-square was used to discover the relationship among the dependent and independent variable.

3. Results and discussion

3.1 Demographic Characteristics

Data revealed that more than half of the respondents were below 30 years of the age. It means that majority respondents were young. Rest of the respondents was above 30 years of age (Table 1). It was seen that only 17.5% respondents were illiterate, which showed that a majority of the respondents were educated (Table 1). Almost same results were found by Malik (2012).

Respondents have very low level of income because there were no job opportunities available for them except working on the fields on daily wages. Majority respondents had monthly income only up to Rs.15000. Similar results were found by Suleri and Haq (2009) who revealed the average household income of the country is Rs.14127. Only 10% of the respondents had income level of more than Rs. 25000 which is reasonable income (Table 1).

Table 1. Demographic Variables

Variables	Category	Percentages
Age	below-18	3.3
	19-30	50.0
	31-40	26.7
	41-above	20.0
Education	Illiterate	17.5
	Educated	82.5
Income	below Rs. 5000	15.0
	Rs. 5001-10000	27.5
	Rs. 10001-15000	25.0
	Rs. 15001-25000	22.5
	Rs. 25000+	10.0

3.2 Association between various variables

Correlation coefficient (Pearson) (Table 2) reflected that there is small negative association among income, education, govt. policies and food security, while there is positive relation between income and poverty which showed significant results. Furthermore, education and food security also showed positive relation with poverty, whereas, govt. policies had significant positive relation with food security.

The association of food security with various variables was tested with chi-square and data in this regard are presented in (Tables 3) which shows significant positive association between food security and education of the respondents. This means that with the increase in education of the respondents,

there will be increase in food security. Similar results were reported by Farrell (2013) and Haile et al. (2005) particularly with respect to education.

There existed a significant positive association between government policies and food security. It means that food security was increased with the increase in government policies regarding food security. Data (Table 4) reflect that the percentage was gradually increased for food security for poor government policies (7.89%) and satisfactory (18.42%) and showed highest level of percentage (73.68%) for food security at good level of government policies.

Furthermore, income and poverty showed non-significant association with food security. Similar results were obtained by Vichealth (2004). Data in the (Table 5) showed a non significant association between food security and income. It means that here is no association between income and food security. Food security is low for high level of income (7.89%). Similar results were found by Vichealth (2004). Although most persons living in poverty are at risk of food insecurity, it cannot be assumed that they are, in fact, food insecure. In addition, for many reasons, including factors such as ill health, disability, sudden job loss, and high living

expenses, persons above the poverty line cannot be assumed to be food secure.

There existed a non significant association between poverty and food security. It means that with the increase in poverty there is no increase in food security. Data (Table 6) showed that the percentage was gradually decreased for food security for high level of poverty (31.57%) and high level of percentage for medium level of poverty (52.63%). Similar results were found by Arif (2007) with respect to poverty and food security.

Maharjan (2009) also showed similar results with respect to poverty and food security, however contradictory results were found by Marco and Thorburn (2009) with respect to income and food security.

Moreover, respondents had no idea of saving their crops from natural disasters. There was no chance of flood in the study area but they might be affected by climate change and heavy rains which can destroy their crops because unfortunately there were no awareness and educational programmes regarding food security and people were unable to save their crops from climate change and natural disasters.

Table 2. Correlations Coefficient (Pearson) of various variables (n = 120)

	Income	Education	Govt. policies	Food security	poverty
Income	1.000	-.134	-.070	-.131	.388**
Education	-.134	1.000	-.060	.166	.480**
Govt. policies	-.070	-.060	1.000	.212*	.048
Food security	-.131	.166	.212*	1.000	.197*
poverty	.388**	.480**	.048	.197*	1.000
	.000	.000	.599	.031	

** Correlation is significant at the 0.01 level (2-tailed) * Correlation is significant at the 0.05 level (2-tailed).

Table 3. Association between education and food security

Education	Food Security		
	Low	Medium	High
Low	26.92	26.31	30
Middle	59.61	36.84	60
High	13.46	36.84	10

χ^2 cal. = 10.692*

df = 4

Table 4. Association between gov. policy and food security

Gov. Policy	Food Security		
	Low	Medium	High
	Percentages		
Poor	16.66	3.84	7.89
Satisfactory	36.66	40.38	18.42
Good	46.66	55.76	73.68

$$\chi^2 \text{ cal.} = 9.491^* \quad \text{df} = 4$$

Table 5. Association between income and food security

Income	Food Security		
	Low	Medium	High
	Percentages		
Low	30	48.07	44.73
Middle	50	46.15	47.46
High	20	5.66	7.89

$$\chi^2 \text{ cal.} = 5.687^{\text{NS}} \quad \text{df} = 4$$

4. Conclusion and Recommendations

Majority of the respondents had low level of income and more than half of them were expended on food items only. There was neither a job opportunity available for the respondents except farming or the replacement in agricultural equipments. So, there must be economic opportunities provided to the people. Government should make precautions to save the crops from natural disasters. Government must launch awareness programs in the area of food security.

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