

## **A Sociological Analysis to Assess the Socioeconomic Vulnerability of the Flood Affected People in Southern Punjab: A Case Study in District Muzaffargarh**

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### **Abstract:**

*Flooding is a serious common and costly hazard that many countries faced regularly including Pakistan. Floods occur repeatedly in Pakistan and cause tremendous losses in property and life. Flood vulnerability, their impact and the flexibility of communities have been assessed here on watershed meso-level. The main objective of this study is to assess the socio-economic vulnerability of the people. The area of study is Southern Punjab (District Muzaffargarh). This study has sociological approach on the base of quantitative research. Interview schedule was used to collect the data. This study shows the level of hazard and vulnerability assessment regarding flooding. Flooding has great impact on the infrastructure like roads, hospitals, educational institution, and houses. The result show the agriculture system of the study area badly destroys. It has negative impact on the people livelihood. Researchers suggested to control these hazards, policy making and built the dam to save this water.*

**Key words:** Flood, Vulnerability, hazards, Socioeconomic

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## **1. Introduction:**

Natural disasters occurred like earthquake, tsunami and Flood. In this study the main focus of the researchers is flood disaster. Flood is most common disaster in the whole world especially in the Pakistan. When it's happened, cause of huge destruction. All the functional institution disturbed due this blind disaster. A restless situation creates in the society. The whole structure of the effected society scattered in unmannered way.

Most of the countries faced this disaster due to the different reasons. But, Pakistan is very rich to face this disaster. Every year thousands of the people faced this chronic disaster. Flood water have caused of damaging loss of live, livelihood and property. It's also consequences of destroying crops, vegetables, loss of livestock and displacement of the people. In the context of Pakistan, the present study emphasis in south Punjab. It is very rich with the river. Indus River is also flow in the southern Punjab. When heavy rains fall and climate changed, intensity of water increased in the river. The magnitudes of this water become cause of destruction for the people. People faced a serious tragedy. The beauty of the southern Punjab is that mostly people belong to the agriculture sector. For the irrigation system they lived along the river. When the capacity of water increased in the river, then the canals are full by the water and in result destruction of crops and other infrastructure. People become more vulnerable by this natural hazard.

In this existing study, main focused of the researchers to assess the destruction of socioeconomic vulnerability in District Muzaffargarh. It is located between two rivers Chanab and Indus. In 2014 the intensity of water increase in these two rivers and in result a huge loss faced by the people. All infrastructures of society affected by this hazard like educational institution, hospital, roads and house. It also cause

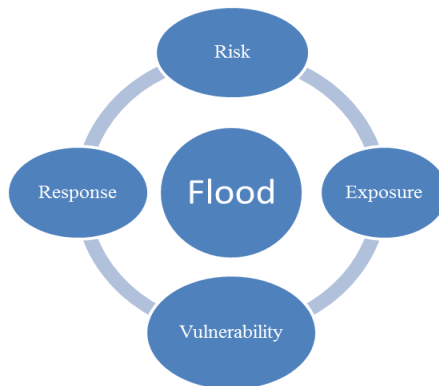
of Loss of life and property in the district. The main happened during this flood is , a barat was crossing the river Chanab on the boat , unfortunately intensity of water increased and nine people sink in the water including bridle. A Young army man tried to save them but he has lost his life in that heavy water.

**Muzaffargarh:** it is Located in the Southern Punjab. Two rivers flow in this District Chanab and Indus. This is agriculture zone. The famous personality of this District Jamshaid Ahmed Dasti. According to 1998 census the total population of this district 342000. There are 4 tehsils 1 Muzaffargarh, 2 Alipur, 3 Kotadu and Jatoi.

### 1.1 Objective of the Study:

#### 1. To assess the socioeconomic vulnerability of the flood affected people in District Muzaffargarh

According to Mustafa (1998) hazards happened when natural extremes and social structure interact commonly. We perceived that hazards related the physical event cause of disaster like war and e.t.c. He related that flood is a function of four interactive variables.



Flood is function of these four variables.

**Risk:** that function is physical and human processes affect the Nature.

**Exposure:** That function, which is socially, determined physical locations of the communities and risk of societal structure.

**Vulnerability:** is a state of defenseless which relates a community powerlessness that is commonly perceived deliberating effect of events as disaster or natural hazards. Defenseless leads to poverty, isolation and weakness.

**Response:** after the disaster, the community response and controlling the physical risk behavior. There should be analysis of individual and organizational behavior about this disaster.

He conducted the comparative study of two cities Rawalpindi and Qatalpur in Pakistan. In result, criticize the political structure and unequal distribution of resources in the rural and urban areas. Power and institutional relation lead to vulnerability or development in the society. The paper contends the structure of the Pakistani society that is cause of natural disaster and vulnerability among the poor people. He argued that there should be proper management of the resources for safe the vulnerability and chronic disaster.

Jonathan (2006) stated that “physical damage to property is one of the major causes for tangible loss in floods. This includes the cost of damage to goods and properties, loss of income. Some impacts of floods are intangible. Intangible losses also include increased levels of physical, emotional and psychological health problems suffered by flood-affected people.”

When the flood came many tangible and nontangible things destroyed or disturbed by the heavy water. People lost many precious things like, furniture property, gold, wheat and livestock in the water. The entire infrastructure destroyed by the water. People have no place for the settlement. Those people who earn on the daily base and not saved money for the future, they become more vulnerable during the flood. Some

landlords or businessman have stock of luggage, they lost in the flood and become mentally disturbed due to heavy loss. The victimize people become psych patient, because they faced heavy loss. Sometime they remain mentally upset. Many people victim of diseases during the flood and died, because they have no proper cure or treatment.

Gerg (2003) states that flood are not a recent hazard but one that has occurred throughout the recorded history. On the one hand, it is related to a wider global ecological crisis to do with climate change and rising sea levels but on the other hand, it is also the effect of more-localized human activities. A whole range of socio-economic factors such as land use practices, living standards and policy responses are increasingly influencing the frequency of natural hazards such as floods and the consistent occurrence of disasters. Certainly the frequency of events and the number of people affected have increased gradually as human related activities such as deforestation, overgrazing and urbanization intensify environmental conditions, making communities more vulnerable.

Mark (2005) argued that human populations worldwide are vulnerable to natural disasters. Certain conditions such as geographical location or people's income level can affect the degree to which natural disasters impact people's homes. Affected people touch the absolute poverty especially poor those lived in semi kacha houses and mud houses. The intensity of water harshly damaged their houses and push to the blue sky roof.

## **2. Methodology:**

In this research the data was collected on the bases of quantitative research. There were two reasons to use the quantitative method. First in quantitative research used the numerical analysis and then analyze the data through numeric

way. Data was collected by self-administrative questionnaire and interview. The universe was taken by the researchers Tehsil Muzaffargarh. Target population was flood affected people of District muzaffargarh in four union council, Ghazi ghat, Thata Gurmani, Dogar kalsra and Mehmood Kot. 120 respondents were taken as a sample population. Sampling technique was purposive sampling. Interview schedule was used for data collection. Coding was made for statistical analysis. Data analyzed by SPSS 17.0 versions. Percentages were used for empirical evidences.

### 3. Results and Discussion

#### Summary table of findings this study

<b>Demographic</b>	
Male household respondents	69.2 %
head of household primary education	65%
Average income of the household	20000-30000 (39.2%)
Profession of the household	52.5% farmer
Cultivated land	58.3 % have cultivated land
Major crops	Sugarcane 50%
Livestock's	75% have livestock's
<b>Infrastructure affected by the flood</b>	
Impact on House	54.1 % damaged
Impact on Sanitation	59% with access to toilets and latrine
Impact on Electricity	53.2%
Impact on Roads	65%
Impact on Educational institutions	41.6 %
Impact on Hospitals	29.3%
Victims of disease	51% people victim of Malaria
Quality of water	68% people have access to clean water
Sexual Harassment	56% respondents faced Sexual harassment during the displacement
<b>Economically Loss faced by the affected people</b>	
Agriculture	63% destroy
Canal System	28% destroy
Livestock	53.1 % loss
Loss of Life	10%

In demographic section, most of the respondents were male; there were male dominancy and patriotic society. Decision making power was in the hand of men. Maximum respondents were uneducated and primary pass. Average monthly income of the household was 2000-3000, from the crops, milk and other sources. People belong to the agriculture sector, their professions were farmer. They have cultivated land and grow major crops like sugarcane, rice and cotton. People have livestock for the mechanism of property saving. In the given table show the demographic, social and economic loss during the flood. According to this study the Roads, 65% hospitals, 29.3% and educational institutions 41.6% damaged including private and public schools. 51% people victim of diseases, the quality of drinking water was very poor and during displacement sexual harassment faced people. The agricultural sectors destroy 63% including sugarcane, rice and cotton. Canal system damaged 28% due to high intensity of water and livestock 53.1 loss including goats, buffalo's and cows. 10 % people died during the flood.

## **Discussion**

This study carried out in the District Muzaffargarh to assess the socioeconomic vulnerability of the flood affected people. The intensity of water was very high and people faced a lot of loss. There was no proper management for the flood affected. House, hospitals, educational institution, canals, shops, and roads were damaged by the water. All structure of the society was dismissing. The researchers suggested that there should be policies about the flood. If the flood occurs, aid should be provided to the affected people. For the saving water there should be built the Dam. There should be making policies to rebuild the hospitals and educational institutions. UN (2005) observed that studies undertaken show that the economic

impact of natural disasters shows a marked upward trend over the last several decades. The hazards tend to hit communities in developing countries especially the least developed countries, increasing their vulnerability and setting back their economic and social growth, sometimes by decades. The floods have led to loss of human life, destruction of social and economic infrastructure and deprivation of already breakable ecosystems. The study indicates that social impacts include changes in people's way of life, their culture, community, environment, health and welfare, their personal and property rights and their fears and objectives.

#### **4. Conclusion:**

This study concluded that hazard have impact on the socioeconomic life of the people. A gap occurred the first life and after flood life. These natural disasters are dangerous for the underdeveloped countries like Pakistan. To improve the social and economic life of the people aid should be provide. The agriculture sector destroyed badly. Hence, the flooding is destructive for any country or any community.

#### **5. Suggestions**

- Government should relocate the communities in highly grounds areas where they are willing, instead to live near the river.
- Government and stakeholder should aware about the flood; it can be helpful to save the life and other precious things.
- The Ministry of Agriculture and Cooperatives should through Extension Services encourage Communities to increase area cultivated on the upland in order to enhance food security.



- Government should establish the dams and other policies to control the high level of water. It can be helpful reduce the risk.

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