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A STUDY ON THE IMPACT OF FLOODS ON THE LIVELIHOODS OF THE PEOPLE LOCATED IN PURBA MEDINIPUR, WEST BENGAL

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Abstract:

This study has revolved around the *impact of floods on the livelihoods* of the people residing in the *district of Purba Medinipur and risk assessment* based on the effects. This study has highlighted how individuals are being negatively impacted due to the frequent occurrence of floods in this region of West Bengal. Through this abstract, the scholar has attempted to elevate a brief idea regarding the core components along with the key findings that have been witnessed in the process of examining this particular research work. Moreover, this study has taken into consideration the detailed discussion of the chosen topic through crafting. The problem statement has also been highlighted with the research aims, objectives and questions, the research hypothesis, significance, scope of this study, structure of the research and the summary of this study. The subtheme, where the background of this study has been addressed has helped in understanding the *history of floods* in this region and how it has been affecting the lives of the individuals for decades. The *aims and objectives* have highlighted the main focus based on which the thesis has been conducted. The *hypothesis* has further highlighted the severe impacts the floods have caused on their daily lives. The *scope* or outcome of this research has highlighted the development of initiatives that could further improve the living conditions of the people.

Keywords: Flood, Livelihood, People, River, Problem

Introduction:

To accomplish research work, it is imperative to create a relevant alignment with the research aims and objectives. This chapter has been significant for highlighting the impact of floods on the lives of the residents in this region. Moreover, through the curation of the relevant thematic concerns this chapter has discussed the detrimental impact of the flood on food production along with the aspects like fishing and vegetable production in this region. In addition to this, this chapter has further discussed the degradation of the soil due to the pollution that the flood water has caused in this region.

Analysing the impacts on agricultural lands

With a thorough analysis conducted on this topic, an article articulated by Roy(2014), the district of Purba Medinipur is one the most renowned coastal region which is commonly known for being a place that is prone to floods, especially during the monsoon season. The region has been suffering due to floods for decades which have impacted the livelihoods of the individuals residing there negatively. The two most common occupations in this region are agriculture and fishing. Due to rapid urbanisation, it has been noticed that the agricultural land has transitioned to urban lands which has disrupted the natural environment. This has further impacted the natural resources of the region. This article has highlighted how the conversion of agricultural lands has led to drastic changes in social and economic activities. It has further impacted the lifestyle of the people of the district. Urbanisation has changed the entire infrastructure of the place and has also helped to create job opportunities for numerous individuals but has affected the environment negatively.

The rising impact on agriculture due to climate change

According to the article authored by Maiti *et al.*, (2014), it has been noticed that the change in climatic conditions was another reason for the impact on the agricultural lands in the district of Purba Medinipur. The article has highlighted how this *“global climatic change”* has affected not only *“agriculture”* but also *“livestock”* and this impact was specifically noticed in *“coastal regions”*. It is because these regions highly depend on the natural environment for resources which is a



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reason why their livelihood depends on that. The rapid impact of urbanisation was the reason why there was a change in the climate and the transition from agricultural lands to urban lands has affected the livelihood of the people of the place. There was also a change in the quality of soil as the increase in industrialisation has impacted the quality of crops produced. The major disruption was witnessed in the livelihoods of the individuals who are farmers as they are extremely dependent on livestock and agriculture.

Exploring the various socio-economic factors in agriculture due to flood

As per the article authored by Karan *et al.*, (2015), the impact of flood on the social and economic factors in agriculture has been analysed. It has been noticed that any coastal region's basic importance is placed on the concept of "agricultural resources" as it is considered one of the most common and primary resources for earning their daily livelihood. This has further helped in the economic development of the region but due to increase in industrialisation has hampered the croplands of this place which has affected the livelihoods of the farmers especially as they depend on natural soil which facilitates in the production of food crops. This was the reason why not only the social life but also the economic activities have been affected as this rapid industrialization has led to a loss in natural resources due to pollution.

Identifying the effect of fishing activities

With a thorough analysis conducted on this topic, an article articulated by Acharyya *et al.*, (2015), has helped in evaluating the changes that have occurred in the environment, especially in terms of fishing activities. The chemical discharges from the industries in the river have disrupted the marine life. This has impacted the daily livelihood of the individuals who belong to the fishing community and are highly dependent on the river systems for the purpose of "*aqua farming*". This basically means fish farming as they are grown in tanks, ponds, and so on for commercial activities. The "*over-exploitation*" by numerous industries has hampered the water resources and has affected the entire marine habitat. This change caused by urbanisation has affected the livelihoods of the individuals residing in this district of Purba Medinipur.

Seasonal patterns in fishing activities and their effects on the ecosystem

According to the article authored by Dandapath *et al.*, (2016), it has been witnessed that there was a noticeable change in the patterns of fishing activities as industrialisation has created a significant change in the ecosystem. The change has consistently been noticed due to an increase in tourism activities and it has exploited the marine life of this district. The article has highlighted how tourism has played a crucial role in changing the city's infrastructure and how it has facilitated in the development of the city. It has created numerous job opportunities for individuals but this rapid industrialisation has severely impacted the fishing activity in this city. The infrastructural development has impacted and created a "*damage in the natural environmental landscape and sociocultural landscape*". Therefore, it was recommended to develop strategies that would help in the preservation of the natural marine habitat and also facilitate in improving the environment. The fishing activity has attracted numerous tourists but has disrupted the environment. As the increase in industries and factories has led to an increase in water pollution which was the major reason why there was a change in the seasonal patterns in activities concerning fishing.

Changes in traditional fishing practices and community structure due to flood

With a thorough analysis conducted on this topic, an article authored by Bera *et al.*, (2016), a change has been noticed in the "*fishing culture*" of the people in the district of "*Purba Medinipur*". The city's emphasis on "*Paddy-cum-fish culture*" has helped in the development of the socio and economic factors of the people residing in that district. This also provided a major employment opportunity for individuals. The authors in this article have stated how the "*deep flooded areas*" were traditionally considered to be suitable for fish farming but due to immense urbanisation, it has disrupted this traditional practice. This was the reason why there was a decrease in fish production as water pollution has hampered marine life. The



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district of Purba Medinipur is best known for producing a variety of fish species which has also helped them in attracting numerous tourists. This was the reason why there was a change in the fish community due to the occurrence of floods after industrialisation.

Investigating the impact of floods on the infrastructure

As per the article authored by Chakraborty *et al.*, (2018), it has been analysed that the common natural disaster that is floods in the district of **“Purba Medinipur”** was the major reason why there was damage caused to the transportation infrastructure. In this article, it has been highlighted that among numerous **“natural hazards”**, floods are considered to be the most frequent one that tends to impact a coastal region during the monsoon season. The regions that are flood prone are stated to be the ones that suffer the most due to the occurrence of **cyclones** and rains. This further creates a long-term social and economic impact on the individuals residing in that specific region. Whenever a storm or cyclone causes floods and disrupts the infrastructure of transportation, it leads to **“loss of road links”**. This is the reason why the authors of this article have suggested creating road links that are flood-resilient and working on creating strategies and approaches that would facilitate a management system that is efficient.

Severe impact on public facilities due to floods

With a thorough analysis conducted on this topic, an article authored by Chowdhury *et al.*, (2018), the effect of floods on the facilities or services provided to the public has been examined. The area of Purba Medinipur has consistently been suffering due to floods over the past decades, which has resulted in the creation of long term losses. The waterlogging caused by this issue has disrupted the services provided by the government that includes the basic amenities. Even the cultivation areas are also impacted, which is considered as the basic livelihood for the individuals belonging to the rural part of the district. It is because most of the people residing in those areas have the occupation of farmers. Therefore, it has been recommended to develop services that would be available for the public even during the times of natural calamities as it would help in providing the individuals with basic amenities.

Conclusion;

According to the article authored by Kundu and Goswami (2018), the initiatives for mitigating the severe impact caused due to natural disasters have been analysed. The article has highlighted that strategies should be developed which would facilitate in the enhancement of the **“augmentation of rural connectivity and rural water and land resources”**. This would further help in improving the livelihoods of the individuals staying there and **“improve the agriculture productivity”**. The initiative that has been for the improvement of the cultivation of the crops was through **“NREGS (The National Rural Employment Guarantee Scheme)”**. It is a **“scheme”** that is mainly created for the farmers. This would help the farmers in accordance with **“crop diversification”** and help them in producing a variety of different crops. These approaches have helped individuals in improving their living conditions that were disrupted due to the occurrence of floods. This has also helped in creating croplands that are resilient to floods.

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