

# Impact of Kosi River Flood on the Academic Performance of School Students of Araria District

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**Abstract:** *Kosi river flood is a big challenge for Bihar government and people. Every year it creates devastating situation for human civilization. Araria district is flood- affected district of north Bihar. Whole district is affected badly more than three months. Those villages are situated at the bank of river condition of that village becomes worse during rainy days. Most schools are still poorly constructed and old. The school buildings and villages are always flooded during rainy season, which threaten the academic performance of the students. The objectives of this study to find out the impact of Kosi flood on students' academic performance. In this study, the researcher attempted to investigate the problems faced by school goers during the rainy days in Araria district. To achieve the objective of the study the convenience sampling method used. Researcher selected 20 flood prone schools by purposive sampling method. The size of sampling was 100 students selected from 20 schools. For collection of data, a comprehensive interview was conducted by researcher. Well-structured questionnaires were distributed to hundred students in 20 schools. Further, investigator conducted focus group discussion of parents and took an interview of head master to discover data. The result of this research showed that kosi river flood impacts directly to the performance of the students. It is a great barrier in universalization of Elementary Education and quality education. They were in tense and insecure of any upcoming disastrous events which destroy the infrastructure of schools, disrupt the roads, as well as school routes which made by raw material. The study revealed at further high levels of vulnerability to the impact of floods, reduce the quality of education of students. The researcher identified that during flood time, the transport system and route of schools destroyed by flood. The study reveals to hidden facts faced by school students. Government should take concrete step to control flood. Good infrastructure of school, favorable environment of class room, good school facilities, accessible transport, and social security ensures the quality education and makes the better performance of students in overall.*

**Key Words:** *Kosi River Flood, School Infrastructure, Academic Performance.*

## 1. INTRODUCTION:

It is said that the human population is an asset for any nation. This population becomes human capital when there is investment made in the form of education, training and medical care. It can be turned into a productive asset by investment in human capital. Investment in human resource through education can give high rates of return in the future. It also returns in the form of higher earnings and greater contribution to society. Countries like Japan have invested in human resources. Japan is a developed country despite not having any natural resources. They have invested on people especially in the field of education.

The Kosi river flood threatens every year and destroy community infrastructure and affects the total being of Northern-Bihar as well as Araria district. It also affects student in regard to their quality education. This article provided an overview of flood disaster has their potential effects on student access to Elementary education in Araria. This study has analyzed school student's specific vulnerabilities. This study revealed that flood disconnected students from school, loss of learning hours, increased absenteeism, drop-outs, and student's poor academic performance. Due to food insecurities student left the school. Kosi river flood destroyed the roads and school buildings which influenced student's performance in school. As we know that the literacy rate of Bihar is lowest among all Indian state, Where Araria has the lowest literacy rate among all districts in Bihar. The Kosi river flood has huge impact on literacy of Araria. The literacy rate of India is 74.04 % (census 2011) whereas Araria has only 52% literacy. There are many factors causes low literacy. The devastating flood of this area has huge impact on educational attainment and in quality education. Universalization of Elementary Education (UEE) is the primarily objectives the United nations as well as Indian government's aim to imparting quality education irrespective of gender, caste, region, religion, and colors. But it's unfortunate of nation that having celebrated its 72th years of independence, our government couldn't transform the nation into literate from illiterate. Education is the key to development of a nation. It is unfortunate that our nation still has a major portion of illiteracy. There are many factors behind it which works. But it will be better for the nation to work effectively for education. State should give more attention towards Practical spectrum. There is need to work on ground-level.

## Araria at a Glance

Araria is located at 23 degree north latitude and at 45 degree east longitudes. It is bounded by Nepal in North, Purnea in the south, and kishanganj in the east and supaul in the west. The Araria plain is made by alluvial soil deposited by Kosi River. This river contributed to the devastating floods in this district. It is because the river Kosi River is famous for frequently changing its course. The literacy rate of Araria is very low. Araria has only 53 percent literacy whereas the national literacy rate is 74.04 percent (census -2011). Araria is placed at bottom in the literacy strata.

## A Brief History of Kosi River Flood in Bihar

Flood is an important seasonal phenomenon. This is a natural hazard occur in the whole world. Floods are essential for ecology of many region and areas. They bring new alluvial soil and it fertilizes plains and fills water storage, which is very helpful in farming activities. In the world more than 20,000 deaths and 75 million people affected each year. The Kosi River has largest river basin.

## The Rationale of the Study

Education is the most important instrument for human development. Education is the indicator for nay nation’s development. Education makes of population assets. Central government has been endeavoring to impart quality education since 1947. The universalization of elementary education is the government’s target in which all the student age group 6-14 will get free and compulsory education irrespective of gender, caste, region and religion. To achieve hundred percent literacy, central government and state government made many policies and planning, still 26 percent (census 2011) citizen of India is still illiterate. Bihar is one the most educationally backward state in India. The literacy of the state is only 63.80 %( census-2011), Where Araria district has only 53.53percent. It is huge below than national average. This is most backward region of the country. According to the planning commission, Government of India (1999), Bihar ranks 24 among the 24 states as measure by the educational development index. The backwardness is still higher and same in state as well as in District. The present study makes an enquiry into problems and effects of Kosi river flood impact on student education. The academic performance of students in Kosi river flood area is very poor. It has been seen that there are many causes behind it. Kosi river flood has also one major factor which influences the academic performance of students. The flood creates many problems which breaks the attention of the students from studies. Due to long closed schools, student’s willingness towards studies decreased. It also leads drop-out problems. Parents have no options for their children. So they send them to labour work or earn money for family.

## 2. OBJECTIVES OF THE STUDY:

- To study the impact of Kosi river flood on the academic performance of the students in Araria District
- To study the Kosi flood that influence on school infrastructure and library assets.
- To study the Kosi flood that influence on transportation and route from home to school.

## 3. RESEARCH METHODOLOGY:

Araria district is constituted of nine blocks. Out of 09 blocks of Araria, one block was selected (Araria) on the basis of convenience sampling method. The first part is a qualitative study which includes case study of ten drop-out students and interview of education officer of district. The larger emphasis has been given to qualitative case studies for depth understanding and effects of flood on school students studies.

To know the effect of Kosi river flood on school student’s studies, investigator developed interview schedule for focus group discussion with parents. Through FGD, researcher got informations related students challenges and problems faced during rainy season and at the time of flood. School head master is the primary informants regarding school related and teachers related as well as students related problems faced at the time of flood period. Therefore, the researcher contacted ten head master of different school which is situated in flood prone area. To know and understand more about students real and hidden facts, researcher took interview directly of students. To know the reasons to leave the school without completing their eight standards, researcher contacted drop-out students through school head master. Head master gave some name and address of students who did not attend school for long time and did not give any information last one year. The criterion of the selection of the sample is based on the convenience method of sampling. For primary data, researcher visited many primary and secondary school which are located in flood prone area.

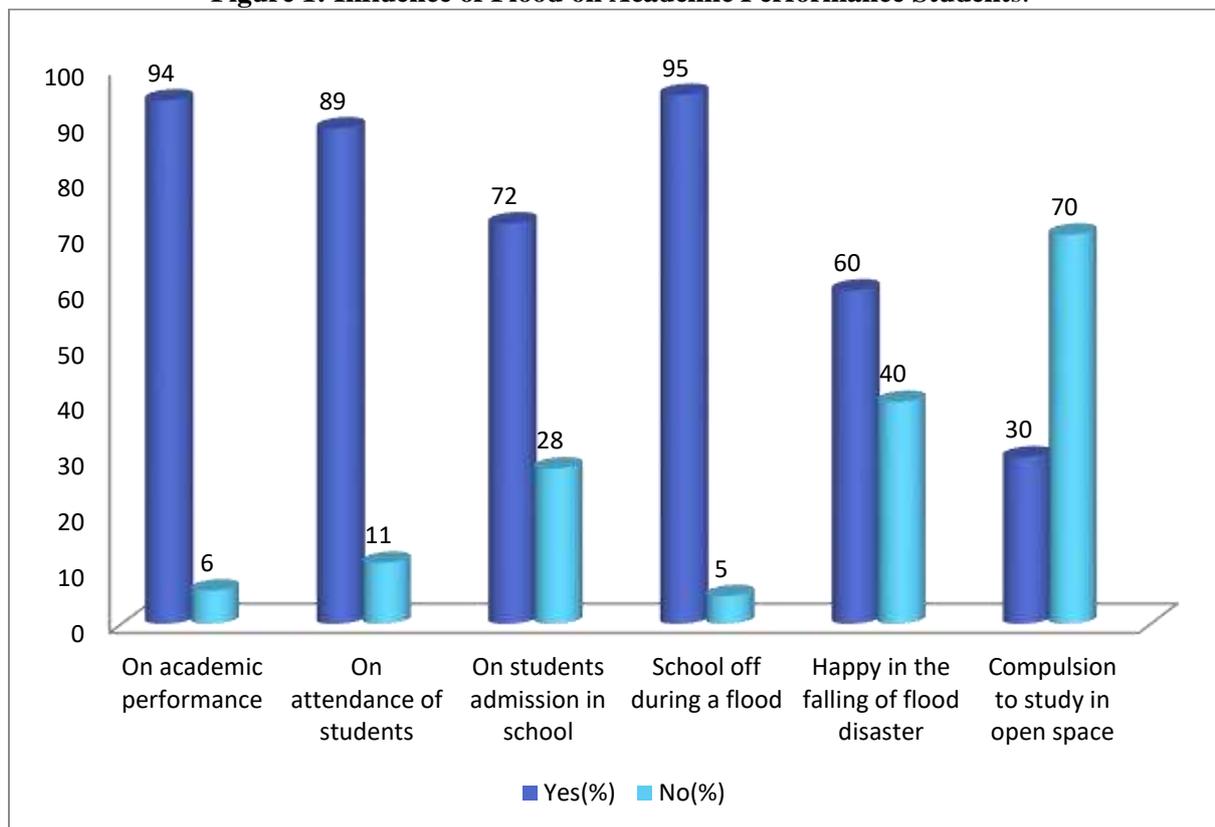
## 4. DATA ANALYSIS AND INTERPRETATION:

**Table 1: Influence of Flood on Academic Performance Student**  
**How do students perceive the effect of flood influencing their academic performance?**

Effect on students’ academic performance due to kosi flood.	Responses(yes)	Yes (%)	Response (No)	NO (%)
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On academic performance	94	94	06	06
On attendance of students	89	89	11	11
On students admission in school	72	72	28	28
School off during a flood	95	95	05	05
Happy in the falling of flood disaster	60	60	40	40
Compulsion to study in open space	30	30	70	70
Total students- 100				

**Figure 1: Influence of Flood on Academic Performance Students.**



From the above figure 1, 94 percent of the respondents agreed their academic performance was lower due to kosi river flood. Only 6% respondents disagreed about their academic performance. They thought that their academic performance doesn't depend on flood. 89 % of the students respond that they did not attend the school during flooding situation, whereas 11 percent of the respondents attended the school during flood time. Majority said that during the flooding situation the admission goes decreased. 28% the students responded that there was a decrease in admission in the school during flooding condition. 95% students replied that the schools were closed during the flood. Only 5% of the students responded that there was open school during flood time. Majority 70% of the students told that No class operated in the open space during the flood. Only 30% of the respondents responded, there is class in the open space. 60% students were quite happy that school is closed due to flood. 40% students were unhappy due to flood disturbance of school.

**Table 2: Influence of the Kosi Flood on the School Infrastructure**

Effects on the respondent's schools due to flood	Yes (%)	NO (%)
Class environment	87	13
Damage of school infrastructure	92	08
Damage of school's physical assets	77	23
Drinking water supply and sanitation	65	35
Damage of physical assets in library	55	45

**Figure 2: Influence of the Kosi Flood on the School Infrastructure.**

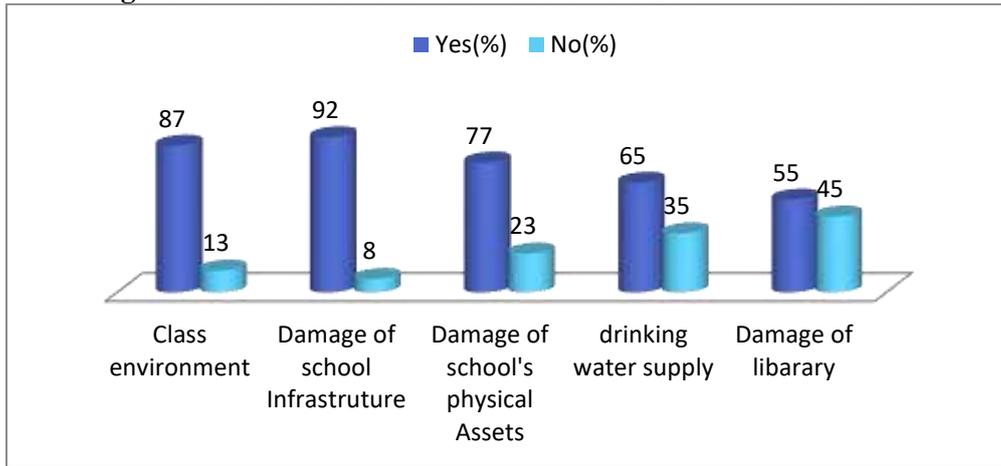


Figure 2 shows that the influence of flood on school infrastructure is very high. 87 % of the respondents told that during flooding time the environment of class is very bad. Only 13% of the students told that there is no any impact of flood on class room environment. 92 percent of the respondents expressed that the flood has huge impact on school infrastructure. It damages and destroys the school buildings and premises, while 08% students told that there is no any impact of flood on school infrastructure, because schools are situated on safe places. 77 % of the respondents agreed that the flood damage the physical assets of the school, where as 23 % of the respondents replied that the flood has no any impact on physical assets of the school. 65 % of the students claimed that the drinking water system and Capakal have been victimized by kosi flood. There was no availability of drinking water in school in flood days. Water is contaminated. It is not safe to drink. Regarding the physical capital in the library, including books, projector room, computer labs, teaching Aids and materials, Atlas and Maps, furniture and other physical assets damaged by flood. Only 35 percent of the students told that there was no any damage of these school assets during flood period because it is kept in safe mode. These variables were recorded in the access of the conditions of the infrastructures of the schools. The result shows that the kosi flood disaster, the school infrastructure and assets were badly affected.

**Table 3: Accesses to Use of Transport during Flood**

Effects on community infrastructure	Yes (%)	No (%)
Problems in access from home to school	88	12
Problems in access from school to home	84	14
Damage of road to school.	92	08

**Figure -3 Accesses to Use of Transport during Flood**

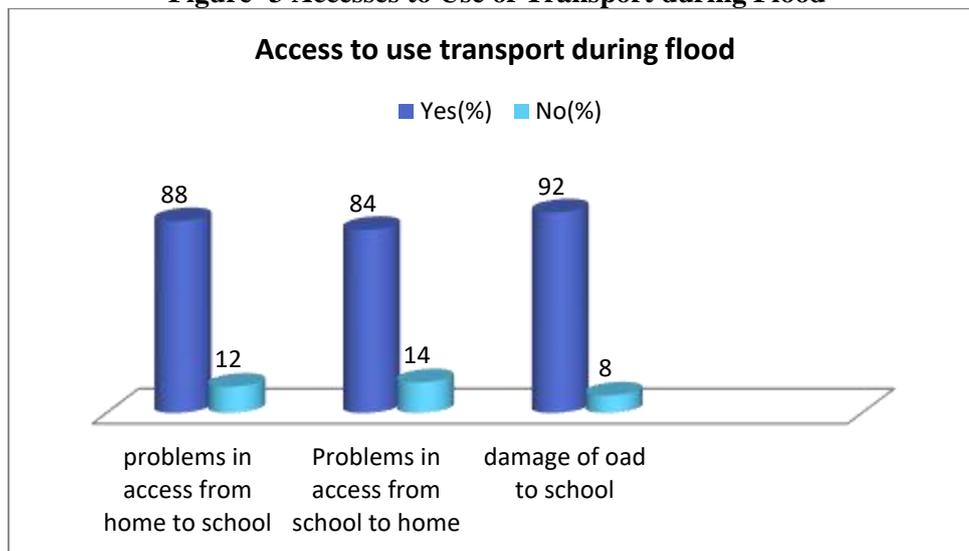


Figure3 indicates that the infrastructure of community also damaged during flood period. 88 % of the respondents faced difficulty in attending school during flood period. Only 12 % of the students have no any problems in attending schools.84 % of the students faced the difficulty in returning from school to home due to damaged and

waterlogging roads. Kuchcha roads are damaged easily by flood. During flood period the transport system of village area becomes very poor. Only 14 percent of the students had no any issue of transport during flood period. There were no problems for them. 92 percent of the students expressed that the road to school from their home damaged and inaccessible during kosi flood. Only 08 % of the students expressed that no any damaged and inaccessible of the route and road.

## 5. FINDINGS AND SUGGESTIONS:

This study reveals that most school was badly affected due to flood. School's infrastructure and premises damage badly. There is water at every place. Many schools were flooded and not possible to reach school. Conditions of road were not accessible and unpainted. Flood makes difficult to them to reach school by road. There is no any other communication amongst the schools in the area. The school floor is occupied by water. It has been seen that there is lack of furniture in the school. Most school has only concrete building but inside there is no sufficient bench and furniture for students. It is quite impossible to sit on ground due to wet land during flood and heavy rain and multiple risks of disease. This disrupts learning and distracts the concentration of students from studies. There are many researches and that fascinating and favorable atmosphere of school has positive effect on students' performance. Students could not get appropriate instructional hours. Teachers were unable to cover the courses in due time and in satisfactory way. It affected directly on performance of the students.

Based on the findings from the study and responses, around 55% of the houses of the students were also affected. Most of the houses were affected by flood during the rainy season every year. Most houses are not concrete so houses get damaged easily. Houses were made with mud and bamboo. Researcher found that the long closed classes and teaching activity proved poor academic performance of students.

Flood- affected children's education suffered badly. The Schools building which are not damaged by the flood water used as shelter by the flood-affected folks and staffs involved in relief and immediate rehabilitation activities during flood time. The furniture and other infrastructure damaged completely by refugee and without reconstruction it is not possible schools could be used for education purpose. Children do not have any activity and work to keep them engaged. Their vulnerability to security risks has increased. Due to long closed day of school, student's willingness to go to school was decreased. There was huge decreasing in attendance in the school. Students go away from the study. Due to flood, students were unable to give attention in their study and ends up with drop-out. It concluded that the effect of the flood on the school infrastructure was extreme. Due to the kosi flood, most schools closed, the infrastructure damaged, drop-out of the students increased which ultimately impacts on the performance of the students. When the school closed for long periods students' parents allow children for labour work. Students have no more focused in their study rather they give focus to earn money for survival. Therefor the academic performance of the students becomes poor and unsatisfactory.

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