Impact of Riverbank erosion on Human life

Dr. Biplab Tripathy¹, Tanmoy Mondal²

Assistant Professor, Arunachal University of Studies¹
Research Scholar (M.Phil.), Department of Geography, Arunachal University of Studies²
tripathy.biplab@gmail.com¹, tanmoygeo132@gmail.com²

Abstract

The side portion of a course of river called riverbank. The area is always important to our human civilization for all kinds of development. But it is not so secure for various problems. Riverbank erosion is one of the critical problems in the world at least in some countries. It has a long term consequences on human life. The problems which create challenge in river basin are flood, landslide, land erosion, deforestation etc. The victims are migrated and they become hopeless. On the other hand river bank erosion also affects river ecology in different way. The peoples those lived in near to bank area of river are suffered by economically, social insecurity and health problem indirectly by riverbank erosion. All these insecurities caused by the forced of displacement of riverbank.

Key Words: Riverbank, Riverbank Erosion, Basin area, Flood, Landslide, Land Erosion, deforestation, River Ecology, Social insecurity, Displacement of riverbank.

Introduction

The riverbank word refers to the land besides a river. Geomorphologically it is a result of river gradation. Riverbank erosion has now become a common phenomenon and one of the major natural hazards. Every year millions of people are affected by the river bank erosion. That’s destroying our resource like agricultural land, home, transport route, and crop etc. The impacts of riverbank erosion not only found on our human life but also on the environment. There are lots of examples of long tram suffering of human life by these problems. Human suffer in economic, health, education, transportation, settlement etc.
Different Factors of River Bank erosion

River bank erosion occurs by dually, facts Physical and human. Rivers and streams are dynamic systems as they are constantly changing. The natural process of riverbank erosion can produce favorable outcomes such as the formation of productive floodplains and alluvial terraces. Some stable rivers have a healthy amount of erosion; however, unstable rivers and the erosion taking place on those banks are a cause for concern.

Physical Factor of erosion

a. Stream bed lowering or in fill
b. Flooding of bank soils followed by rapid drops in followed
c. Saturation of banks from off-stream source
d. Redirection and acceleration of flow within the channel
e. Poor soil drainage
f. Wave Action
g. Excessive Sand/Gravel Extraction
h. Intense Water from Rainfall

Human Factors of Erosion

a. Deforestation
b. Dam and bridge construction
c. Unscientific river boundary

Impact of River bank erosion


a. Social Impact

Homelessness: - Due to flood people become homeless and they moved from affect place to another region, that is why homelessness or problem of settlement is one of the most important impact of riverbank erosion. In delta region of Sunderban this is very common issue, there peoples are dynamically migrate from one place to another for dynamic river erosion. The Iswari pur delta of Sunderban is one of the best example of this problem.

Migration: - Migration is one of the problems of river bank erosion. Due to flood, people became homeless and they become migrated from affected place to another for safety and for food. And they face to identity problem to the new place because of the flood destroy their settlement with their documents.

b. Economic Impact

Loss of productive Land: - Due to river bank erosion victim people loss there farming land and it is a main cause of economic problem of basin area. Each years in rainy seasons the lower Ganga river Basin of West Bengal, India is suffered by this problem.
Loss of occupation: - Due to river bank erosion people lost their job because there working place floating by the flood. Due to they have no job there is a risk to became a poor because they have lost their land, property and human life.

c. Other Impact

Improper care for health: - Due to this condition people are not care of their health condition because they do not take a proper healthy food and also pure drinking water that’s why they suffer varies diseases and they don’t take proper medical treatment.

Lack of Education Attainment: - Due to horrible condition of the river bank erosion people lost their shelter and they take shelter school, college etc. So there is no choice to continue the class and also the victim pupils lost their books. And students face problem when their exam.

Criminal activities:-When the people lost everything by the river bank erosion and lack of money that time in victim’s mind criminal activities become grow and it creates the problem of social security.

d. Impact on Transport

The Basic problem of the affected region of riverbank is transport. It is frequently found that after a flood the road way communication become so much hampered that the area become paused due to lack of proper commination system. That time, the prices of different products start to increase continuously and it creates a socio economic problem.

e. Political Impact

There is an indirect relation between riverbank erosion and politics. Govt. played a role to protect the side erosion of river and built river boundary and arranged a level of facilities to disaster prone area at riverbank. Government helps the victim people during flood by giving food, cloth and shelter. . Government also takes care of the victim area and after flood they help people to build their home and also help the students.

Conclusion

It is clear from the above discussion that the river bank erosion and their impacts are very depressing. As a result of poor people not only lose their property but also experiences socioeconomic damage through migration. A report of Dr. Talukder, 2012 on Brahmaputra riverbank erosion represented that, 4521 no of villages was eroded since 1954 and almost 9, 00,000 people affected.

Riverbank erosion thus has negative impact on human life. Conversely, human activities also have impact on river bank erosion. The poverty of the Malawians has created pressure on catchment areas or rivers. People cultivate on riverbank because of its fertile land. Because of
these benefits, there is over-cultivation, poor management of cultivated fields, and in discriminate cutting down of trees.

Reference:


