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## DEPOSITION OF SAND DURING FLOOD NEAR CONFLUENCE OF KRISHNA AND KOYANA RIVER IN 2019

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### ABSTRACT:

Deposition is the geomorphic processes in which sediments, soil and rocks are added to landform have or land mass. Sand is a granular material composed of finely divided rock and mineral particles. It is defined by size, being lesser than gravel and bigger than slit.

Present investigation is carry to assess the deposition of sand near the confluence of Krishna and Koyana river during the flood in 2019. For assess the deposition we use primary method to collect data with the help of GPS. We observed that the there is 8390 sq. mt. area is covered by new sand deposition with average 2 mt. height.

### INTRODUCTION:

Deposition is the geomorphic process in which sediments, soil and rocks are added to landform. Deposition is dynamic process which is totally depended on the rate of erosion and volume as well as speed of water.

Basically high rate of deposition is observed in old stage of river life which is called as cycle of erosion. Deposition of eroded material is different which is divided on the basis of its size. It includes gravel, sand and silt. Fundamentally gravels are deposited in youth stage, sand is deposited in mature stage and silt is deposited in old stage. Sand may be defined by size, being lesser than gravel and bigger than slit.

**OBJECTIVE:**

1. To measure the sand deposition near confluence of Krishna and Koyana river during the flood in 2019.

**DATA BASE:**

For the present investigation data is collected through intensive field work after flood.

**METHODOLOGY:**

The measurement of sand deposition near confluence of Krishna and Koyana river we use the Garmin e-trax 10 hand held GPS. Here calculated the area of deposition by using area calculator tool in the GPS.

**DISCUSSION & RESULT:****Table 1: Height of Sand deposition**

Maximum height	556 m
Minimum height	554m

*Source: Field Work, 2019*

For the calculation of height of Sand deposition here we measure the upper altitude and lower altitude of sand deposition and calculate the average height. Here we observed that the on an average height of the sand deposition is 2 mt.

**Table 2: Area of Sand deposition**

Area	8390.3 Sq. Mt.
length	482.60 Mt.

*Source: Field Work, 2019*

For the measurement of area of sand deposition we use the area calculator tool in GPS and as per GPS data total 8390.3 Sq. Mt. area is covered by new sand deposition near the confluence of Krishna and Koyana river.

**CONCLUSION:**

Deposition is dynamic geomorphic process which is totally depended on the rate of erosion and volume as well as speed of water and in 2019 excessive flood is observed in these two rivers which gives high erosion in mountains region. This all eroded material come with water and fundamentally sand is heavy therefore sand is deposited in base of hilly region and this confluence is located near the hilly region as well as near the confluence of Krishna and Koyana river, Koyana river has big curvature which decrease the speed of water flow and therefore large amount of sand deposition is observed at this place.

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