IDENTIFYING FLOOD-PRONE AREA FOR KOSI RIVER BASIN USING MICROWAVE DATA

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MAJOR OBJECTIVES:

- To analyze Flood over the 13 districts of Bihar.
- To assess changes in landuse/landcover cover for 2019-2024.
- To assess Flood Inundated area for 2019-2024.
- Integrate remote sensing based thematic layers into GIS based AHP model for Flood Susceptibility Model in the region.

METHODOLOGY FLOW CHART:
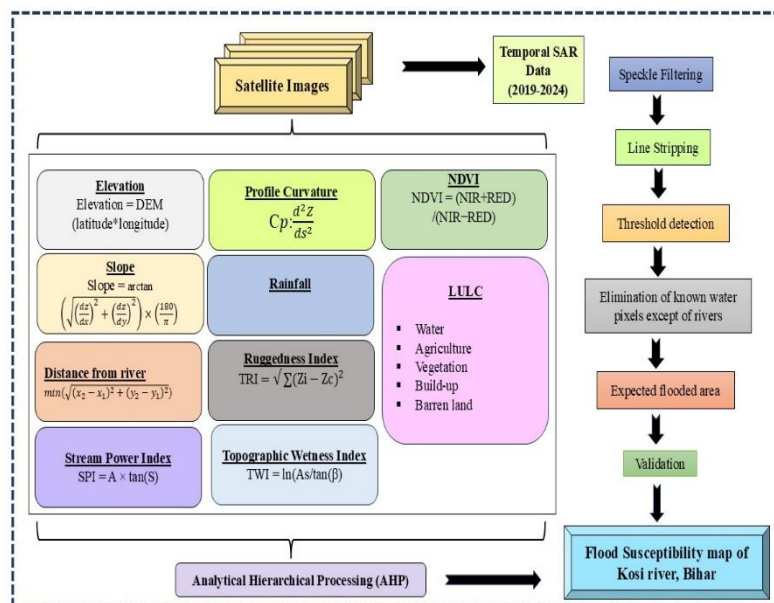
RESULTS/MAJOR FINDINGS:

✓ Flood Susceptibility map was prepared, which suggest the Susceptibility index of the Kosi river basin of Bihar's 13 districts. As per the result 21853412689 sq. meters area is under high susceptibility which contribute to the major part of the study area.

✓ LULC changes was also seen in the years 2019 and 2024. Settlement increased with the time.

✓ Flood inundation was also calculated, and seen that 2020 has highest flood inundated area i.e. 1440538800 sq. meters.

✓ During Field visit the evidence of Flood was found in and around the Madrauni area of Bihar.

Flood Susceptibility Map
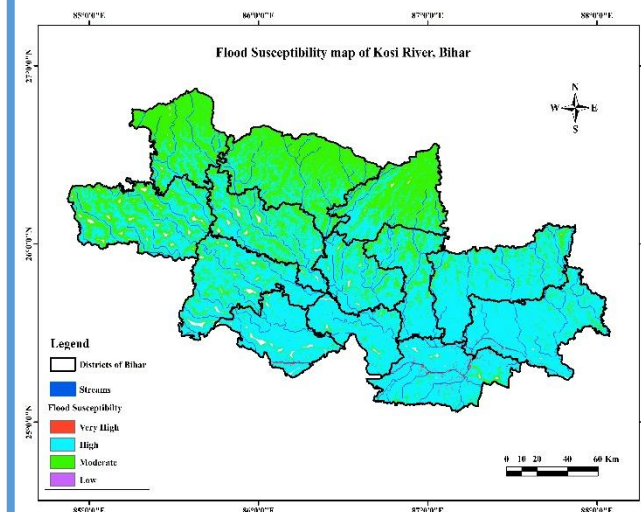
CONCLUSION: The research uses geospatial technology with the Google Earth engine to assess the Flood inundation, LULC changes and Flood Susceptibility model. It highlights the areas which are prone to flood and categorizes it into different flood susceptibility classes.