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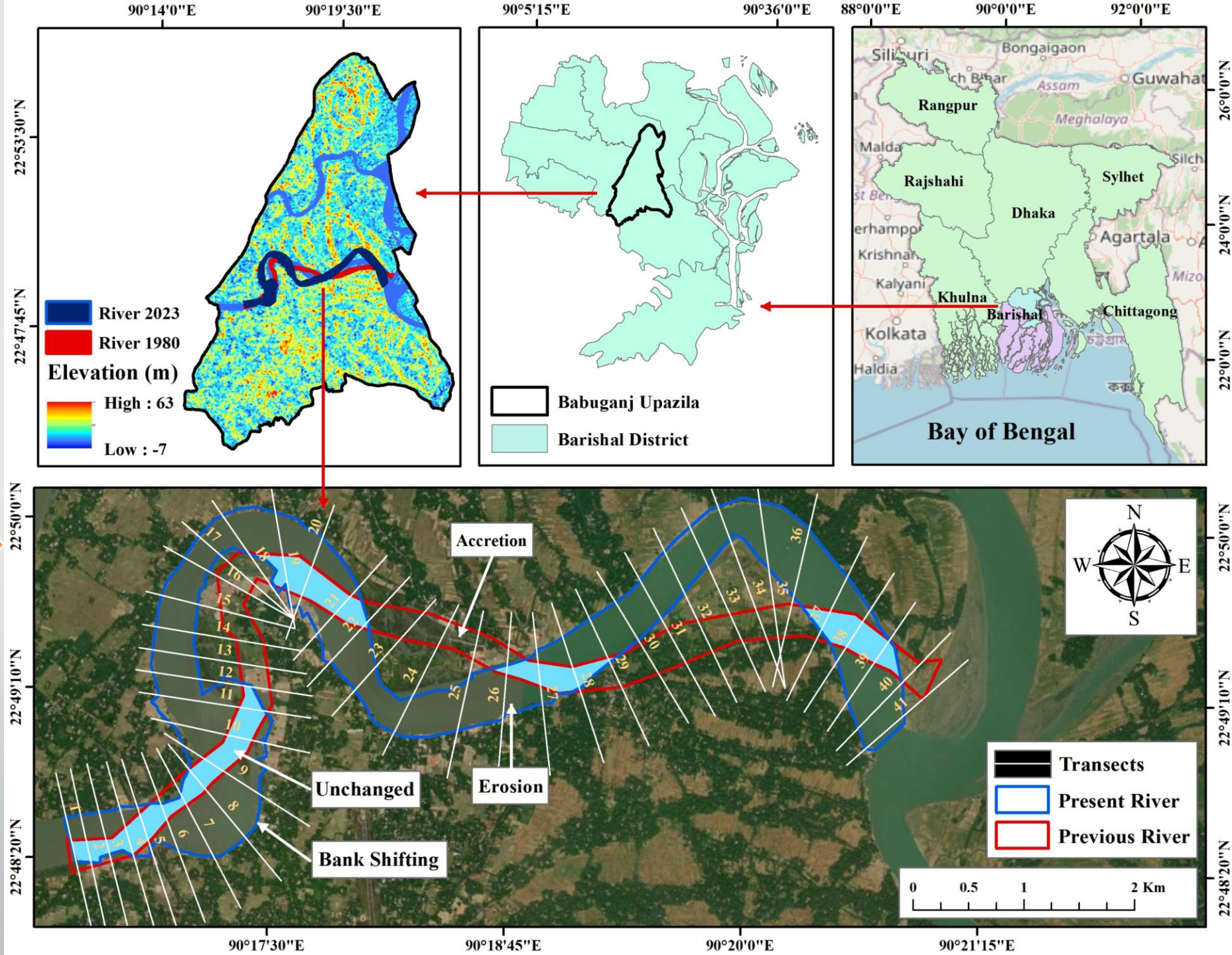
Research Title

Geomorphic Index Alteration of the Sandhya River in Babuganj, Barishal, Bangladesh, and Associated Socioeconomic Impacts.

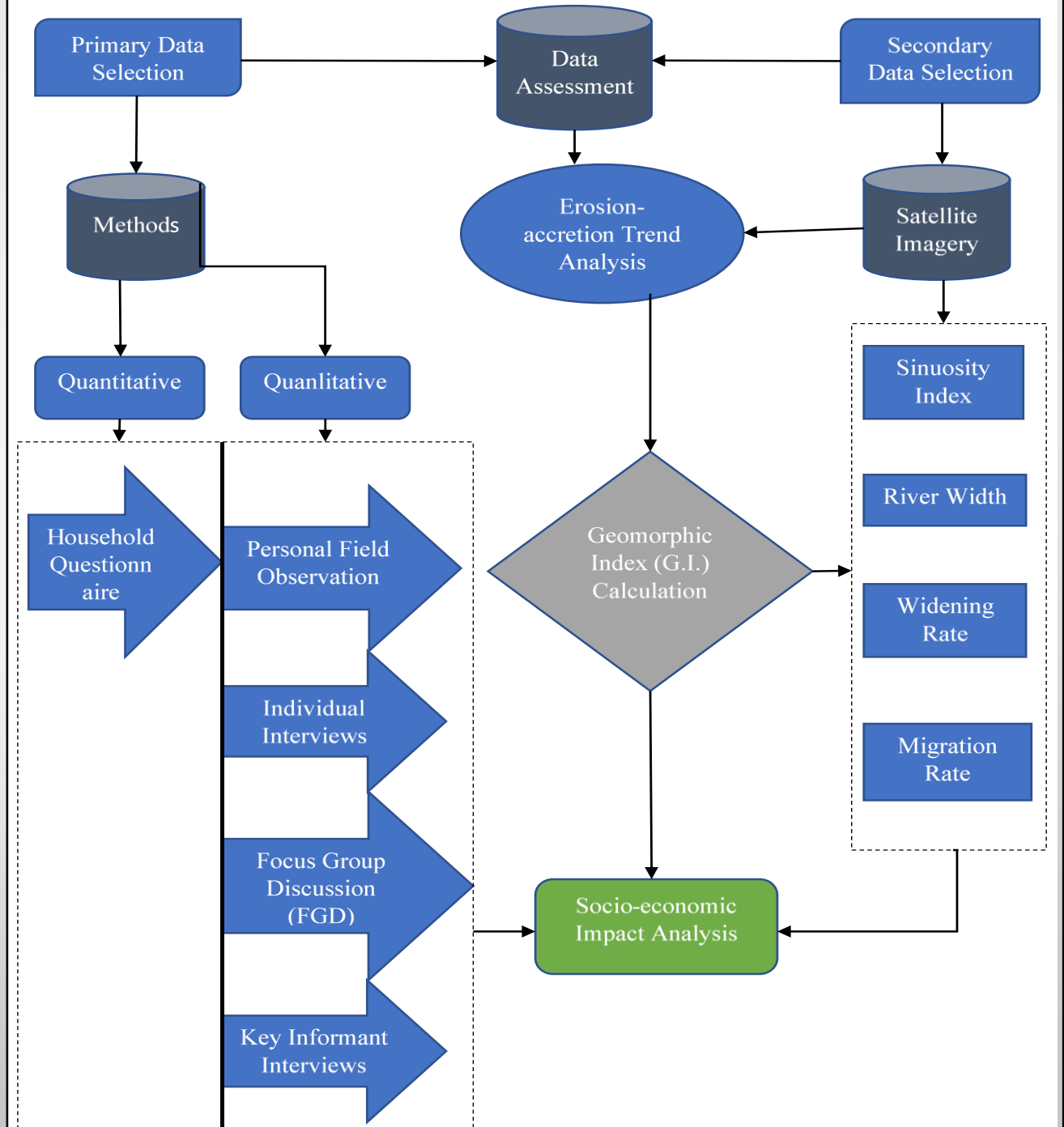
Objectives

- ☐ To examine the effect of human intervention on Geomorphic Index (G.I.) alteration in the Sandhya River by applying four geomorphic indexes: sinuosity index (S.I.), channel width, widening rate, and migration rate.
- ☐ To assess mid-channel bar and sidebar development.
- ☐ To investigate the changes in channel geometry due to erosion-accretion activities from 1980 to 2023.
- ☐ To assess the associated socio-economic impact of river bank erosion in the study area.
- ☐ To understand the bank shifting pattern.

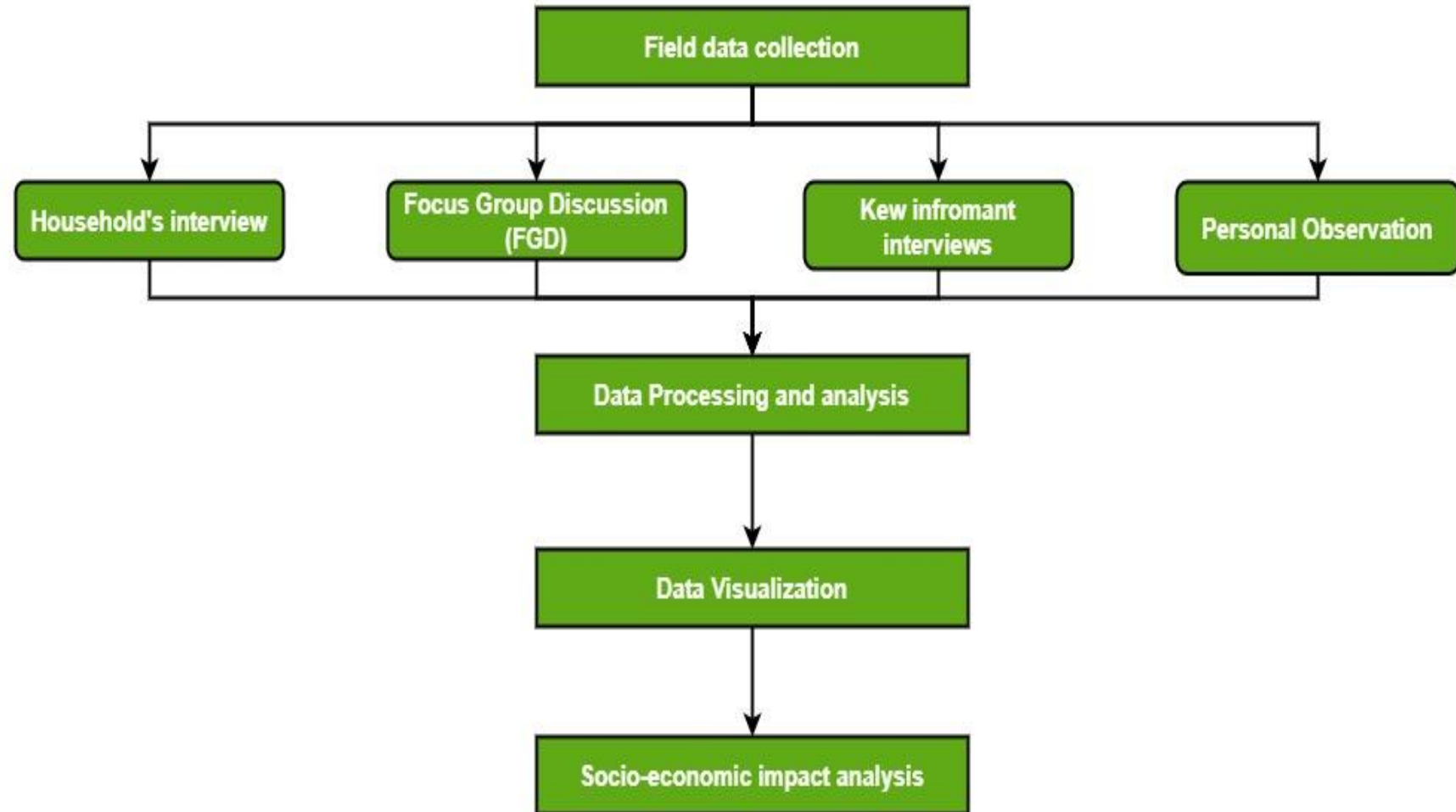
Study Area



Methodology

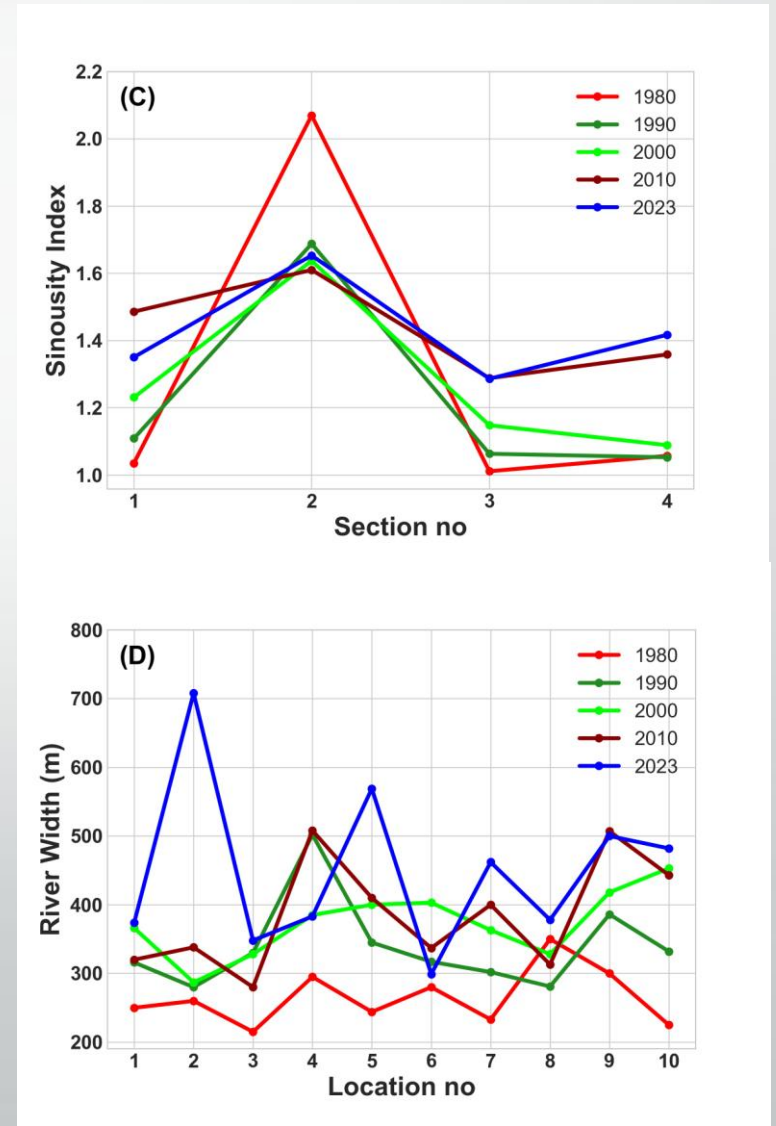
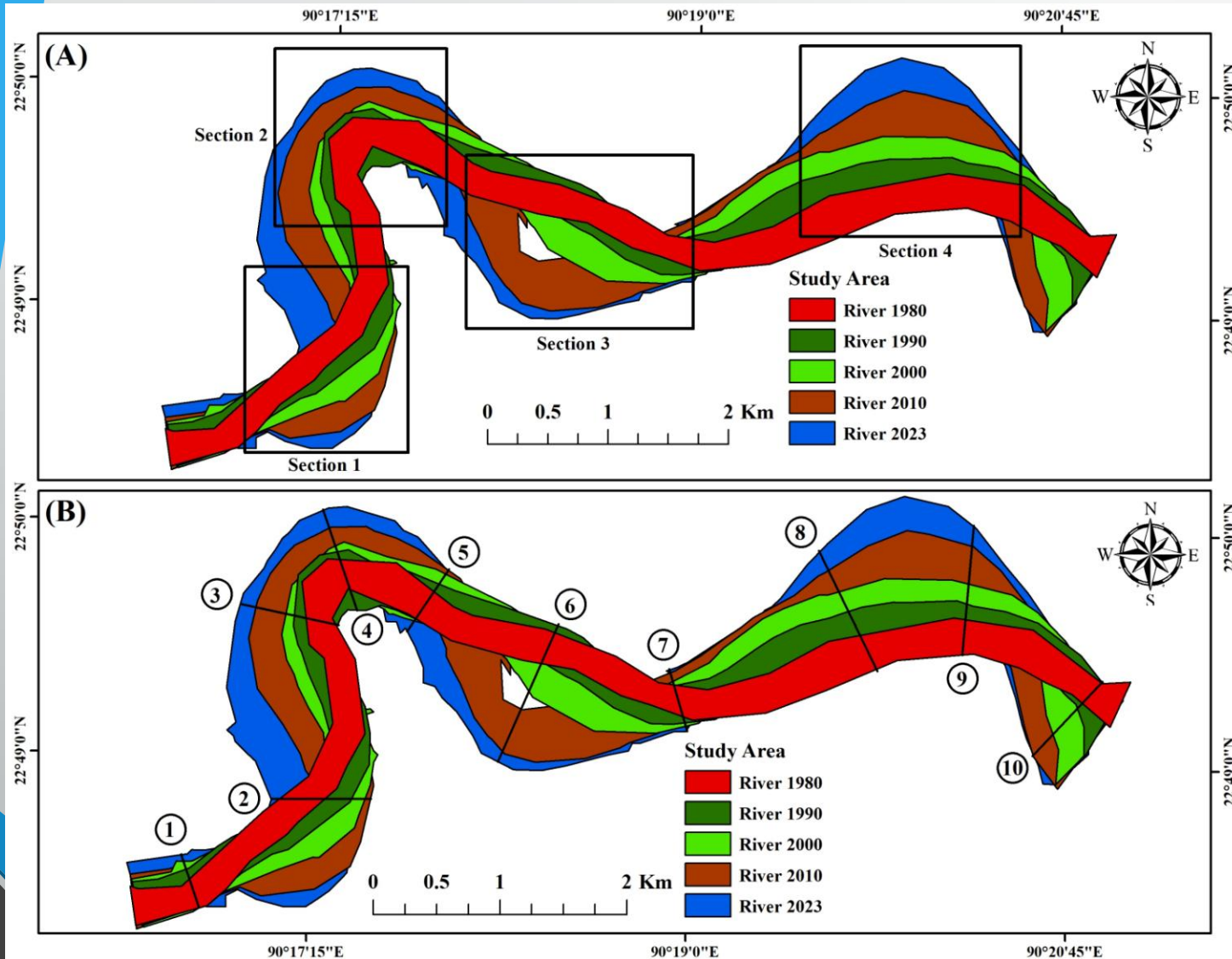


Sampling procedures and field investigation

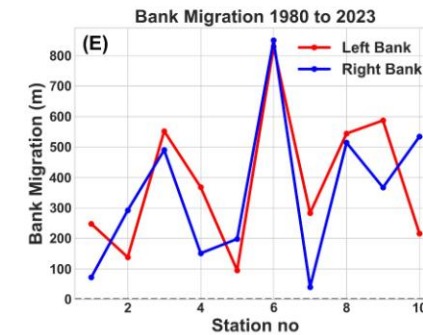
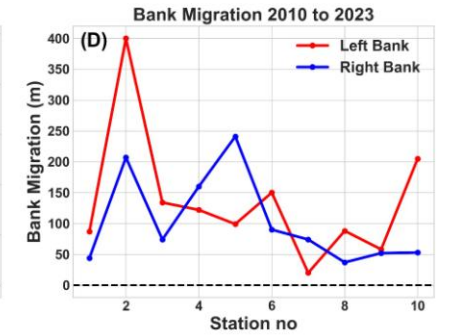
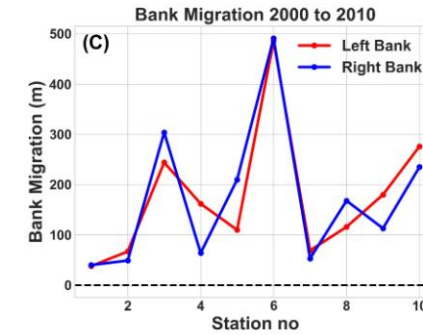
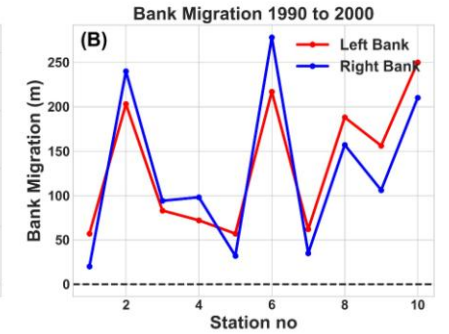
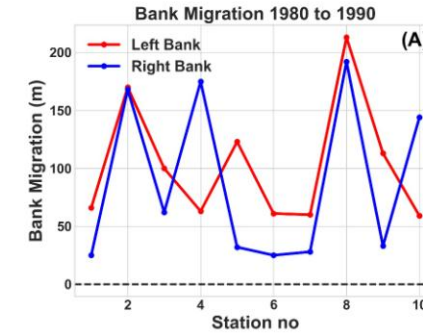
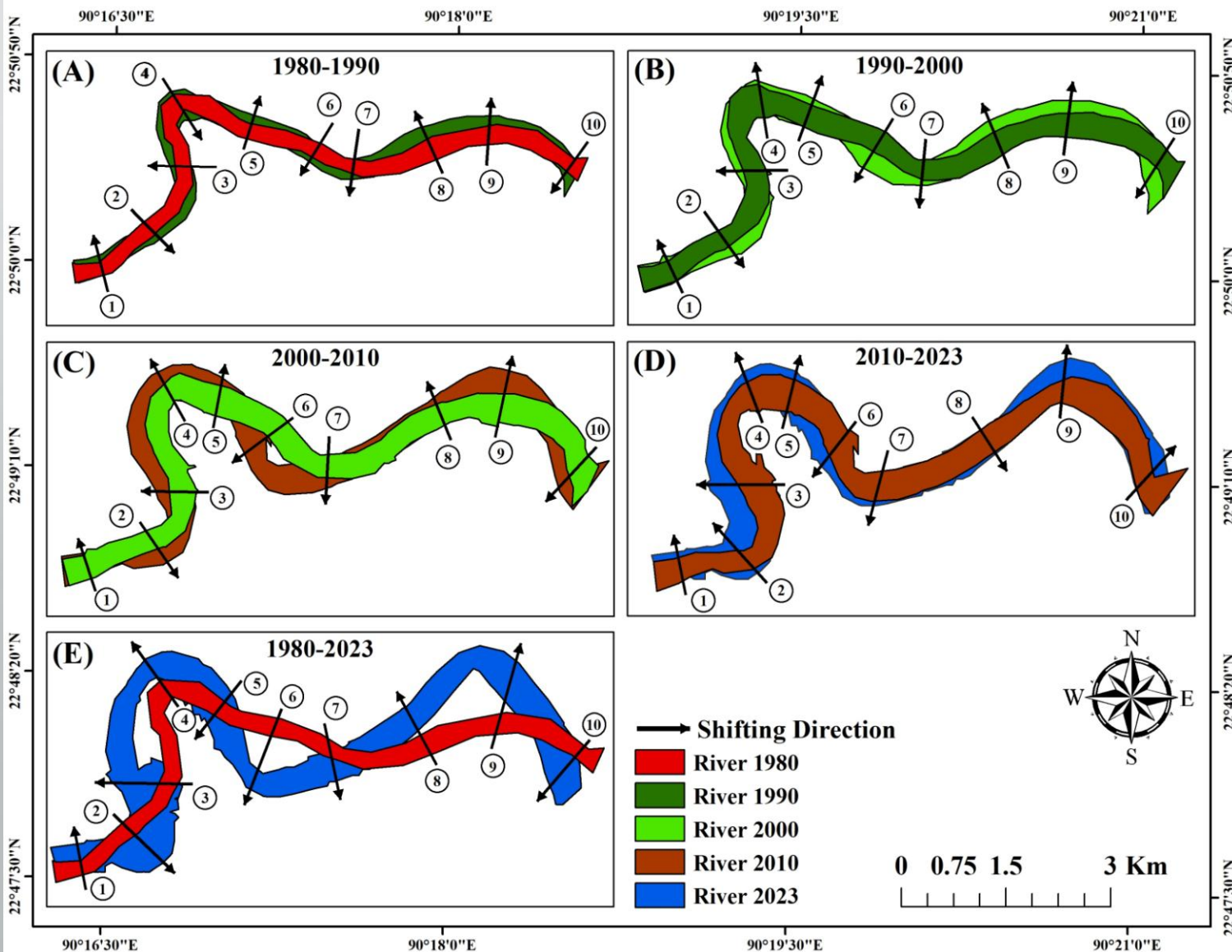


Results and discussions

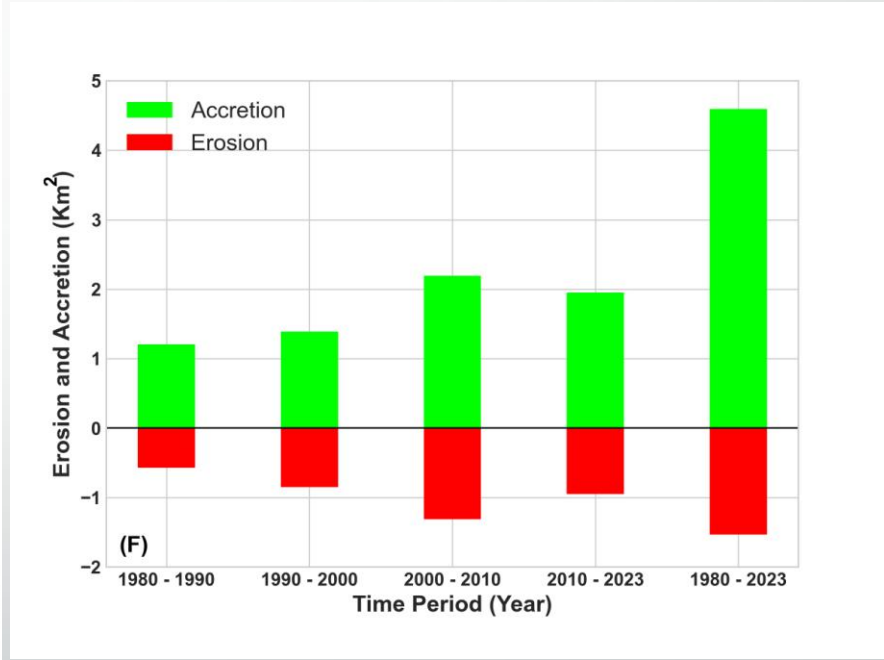
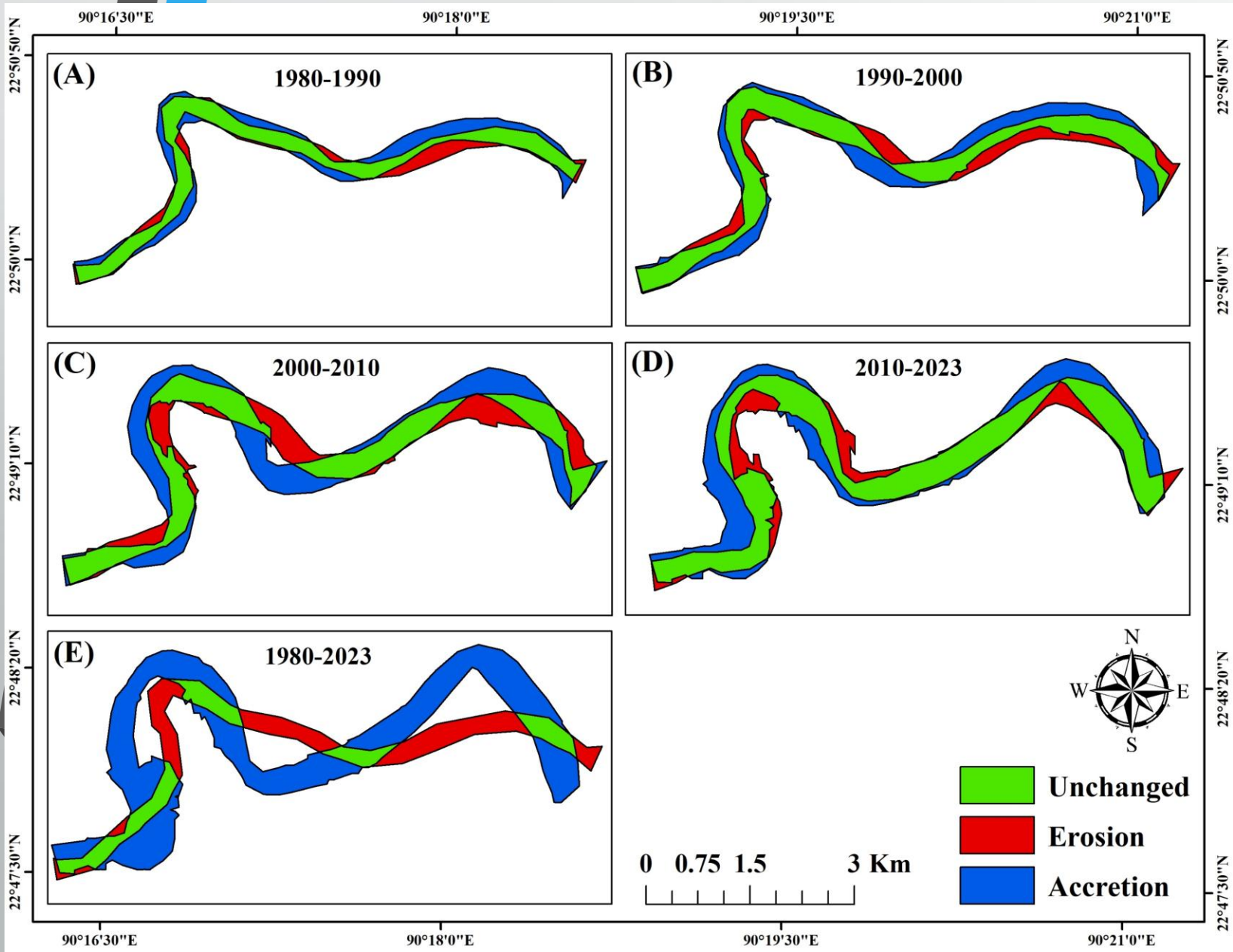
Changes in Geomorphic Index and Channel Width



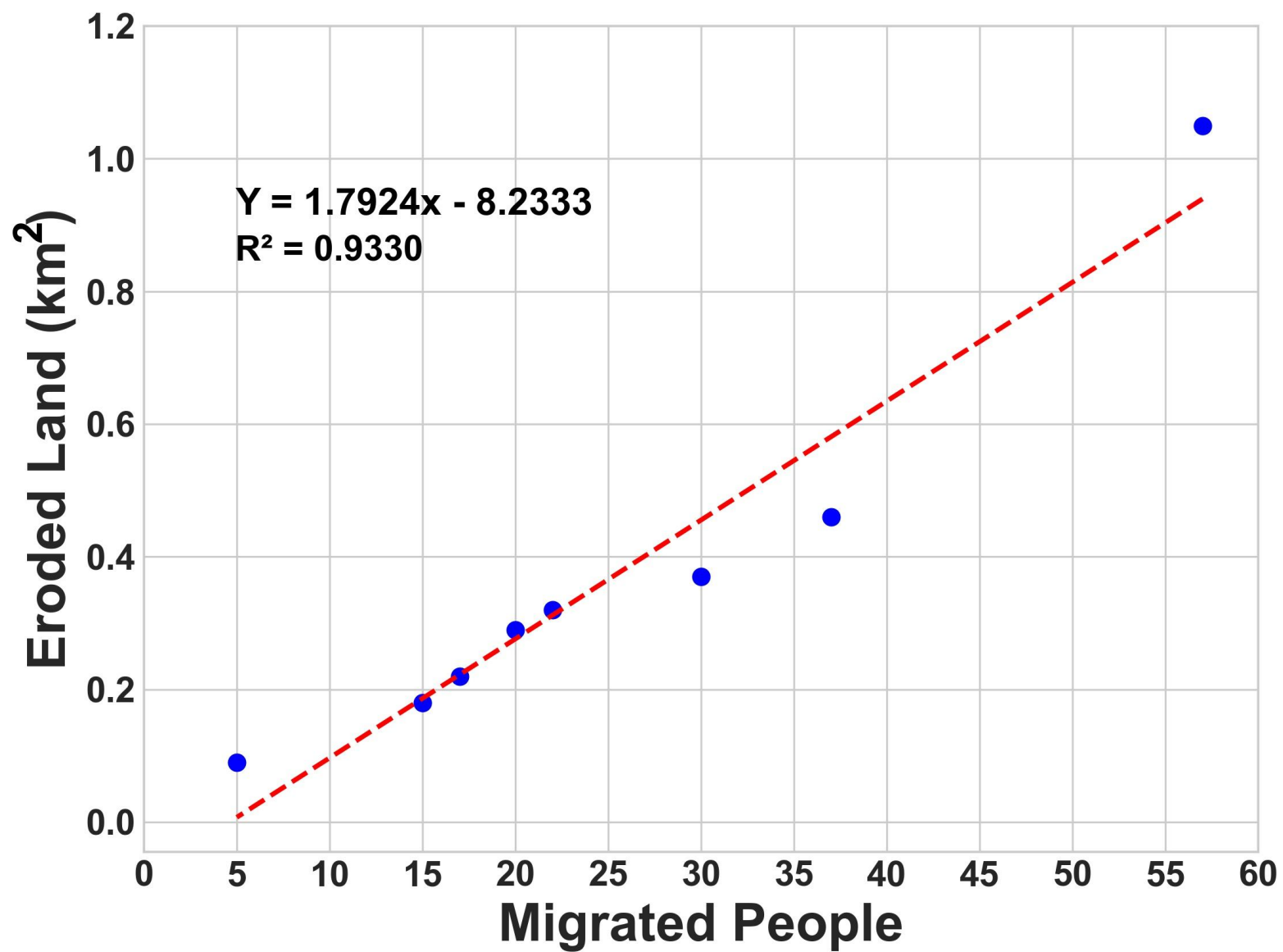
❑ River Bank Migration



Land Degradation and Accretion



☐ Socio-economic impact



Findings

- ☐ The Geomorphic Index is greater in section 2 which is the year of 1980.
- ☐ Every River portion in section 2 will be the bend formation because the GI value is greater than 1.5.
- ☐ Between 1980 and 2023, the left bank migrated more than the right bank.
- ☐ In the observation of 43 years, the accretion is increasing than the erosion of the land area.
- ☐ People are migrating because of the river bank erosion.



Thank you