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Flooded Areas and Flood Plain Characteristics of Punpun River Basin Using Satellite Data

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ABSTRACT

Damage to property, human suffering and loss of life resulting from floods have been increasing annually despite decade of effort and expenditure of over Rs. 3500 million for flood control measures. This losing battle has prompted increased public concern for suitable methods to effectively manage flood prone areas.

Effective flood control measures require current information on the flood plain that its response to floods. It is this context that remote sensing techniques can play an important role, since conventional ground based surveys prove inadequate in providing time effective data over large areas. Especially, after the advent of satellite era, remote sensing methods opened new vista in acquiring flood inundation data because of synoptic repetitive coverage of the satellite. These admirably suit to monitor and study the dynamic nature of flood over space and time.

The report presented herein deals with the measurement of flood areas, information about flooded areas, the flood plain features, flood damage and flood plain land use of Punpun river basin of Ganga river system using Landsat MSS satellite data. The flood plain boundary and other features are delineated and depicted on 1:250,000 scale base map.

