

## **GIS in Mitigating Flood Disaster—Study Area Allahabad District**

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### **ABSTRACT**

India is highly prone to flood disasters. Of the total of 62 major rivers, eighteen are flood prone and flood an area of 150 million Hectares. The importance of planning for disasters has become much more evident in recent years. The role of local governing bodies for disaster management including essential infrastructure development is important to cope with the impacts and to help ensure that the region sustains its economic growth. The objective of this paper is aimed to improve flood preparedness and management for (sadar tehsil) Allahabad district (India). The study includes development of GIS based early response system, and an emergency preparedness plan for the district and also analyze the impact of flood disasters in the region and its relationship to infrastructure development with a view to identify how local governing could help address issues relating infrastructure management. ArcInfo has been used as a tool for storing all types of relevant data for analysis and decision making. The various thematic maps include road network map, water supply network map, land use map, population density map, village boundaries, and relief camp.