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Water resource management in Delhi and Punjab by landuse studies by GIS technique

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Using IRS 1D and Resourcesat satellite data it was possible to infer the landuse pattern of parts of Delhi and Punjab India. In hard rock areas of various parts of Delhi for example JNU, RR Hospital and IGNU shows that interconnected fractures should be tapped for ground water exploration. In case of alluvial terrain of Punjab the spectral reflectance were one of the prime factor to infer the ground water potentiality. The buried pediment plains of Delhi were compared with the alluvial plains of Yamuna in Delhi and Beas basin in Punjab areas.Besides, the resistivity, magnetic and soil moisture field investigations were carried out in all these locations. A key is expected to be generated for water resource management in all these areas for a holistic water resource management. Texture analysis of representative soil of locations with similar spectral reflectance in all these places shows point locations of interactive GIS based water resource management.