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Impact of Urban Land Transformation on Water Bodies in Srinagar City, India

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Author(s)

Shahab Fazal, Arshad Amin

ABSTRACT

Human actions rather than natural forces are the source of most contemporary changes in the state and flows of the biosphere. Understanding these actions and the social forces that drive them is crucial to understanding, modelling and predicting local, regional as well as global environmental change and also for managing and responding to such change. The present study investigates the patterns of urban land transformation in Srinagar City, which lies in fragile hill eco-system of Kashmir valley. The results points towards unplanned and haphazard urban expansion and transformation. These transformations have severely destroyed the water bodies both in terms of area as well as its quality.

KEYWORDS

Urban, Land Transformation, Water Bodies, Agriculture, Marshy

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References

- [1] M. G. Wolman and F. G. A. Fournier, " Land Transformation in Agriculture," John Wiley and Sons, Chi Chester, UK, 1987.
- [2] P. Blaikie and H. C. Brookfield, " Land Degradation and Society," Methuen, London, 1987.
- [3] S. Fazal, " Urban Expansion and Loss of Agricultural Land," A GIS Based Study of Saharanpur City, India. *Environment and Urbanization*, Vol. 12. No. 2, 2000, pp 133-149. doi:10.1177/095624780001200211
- [4] J. E. Cohen, " How Many People Can the Earth Support?" W.W. Norton & Co., New York, 2004.
- [5] O. O. Ifatimehin and M. E. Ufuah, " An Analysis of Urban Expansion and Lost of Vegetation Cover in Lokoja Using GIS Techniques," *Journal of Environmental Studies and Human Development*, Vol. 17, No. 1, 2006b, pp. 28-36.
- [6] O. O. Ifatimehin and S. D. Musa, " Application of Geoinformatic Technology in Evaluating Urban Agriculture and Urban Poverty in Lokoja," *Nigerian Journal of Geography and the Environment*, 2008.
- [7] S. Q. Zhao, J. Y. Fang, S. L. Miao, B. Gu, S. Tao, C. H. Peng and Z. Y. Tang, " The 7-Decade Degradation of a Large Freshwater Lake in Central Yangtze River," *Environmental Science & Technology*, Vol. 39, No. 2, 2005, pp. 431-436. doi:10.1021/es0490875
- [8] S. K. Karn and H. Harada, " Surface Water Pollution in Three Urban Territories of Nepal," *India, and Bangladesh. Environ Manage*, Vol. 28, No. 4, 2001, pp. 483-496.
- [9] B. A. M. Bouman, A. R. Castaneda and S. I. Bhuiyan, " Nitrate and Pesticide Contamination of Groundwater under Rice-Based Cropping Systems: Past and Current Evidence from the Philippines," *Agriculture, Ecosystems & Environment*, Vol. 92, No. 2, 2002, pp. 185-199. doi:10.1016/S0167-8809

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- [10] J. G. Liu and J. Diamond, "China's Environment in a Globalizing World," *Nature*, Vol. 435, No. 7046, 2005, pp. 1179-1186. doi: 10.1038/4351179a
- [11] UN Environment Programme, "Global Environment Outlook 2000," Earthscan, London, 1999.
- [12] D. Dudgeon, "Endangered Ecosystems – a Review of the Conservation Status of Tropical Asian Rivers," *Hydrobiology*, Vol. 248, 1992, pp. 167-191
- [13] S. Earle, "The Preservation of Asian Wetlands-Birds and Their Problems," *Interdisciplinary Science Reviews*, Vol. 19, 1994, pp. 149-165.
- [14] J. R. Jensen and D. C. Cowen, "Remote Sensing of Urban/Suburban Infrastructure and Socioeconomic Attributes," *Photogrammetric Engineering and Remote Sensing*, Vol. 65, No. 5, 1999, pp. 611-622.
- [15] M. Herold, D. Roberts, M. Gardner and P. Dennison, "Spectrometry for Urban Area Remote Sensing - Development and Analysis of a Spectral Library from 350 to 2 400 nm," *Remote Sensing of Environment*, Vol. 91, No. 3-4, 2004, pp. 304-319. doi: 10.1016/j.rse.2004.02.013
- [16] M. Herold, H. Couclelis and K. C. Clarke, "The Role of Spatial Metrics in the Analysis and Modeling of Land Use Change," *Computers, Environment and Urban Systems*, Vol. 29, No. 4, 2005, pp. 369-399. doi: 10.1016/j.compenvurbsys.2003.12.001
- [17] LAWDA, "Jammu and Kashmir Lakes and Water Ways Authority: Technical Reports on Dal Lake, Srinagar," 1998, 1999, 2000.
- [18] G. M. Rather, M. S. Bhat and T. A. Kanth, "Impact of Urban Waste of Srinagar City on the Quality of