Urbanization's impact on agricultural production systems, social and ecological systems and livelihood status in Bangalore's rural-urban interaction

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INTRODUCTION

Over the last 40 years, Bangalore has been India's fastest-growing city. As Bangalore approaches' megacity' status, these processes are unfolding at an unprecedented rate.

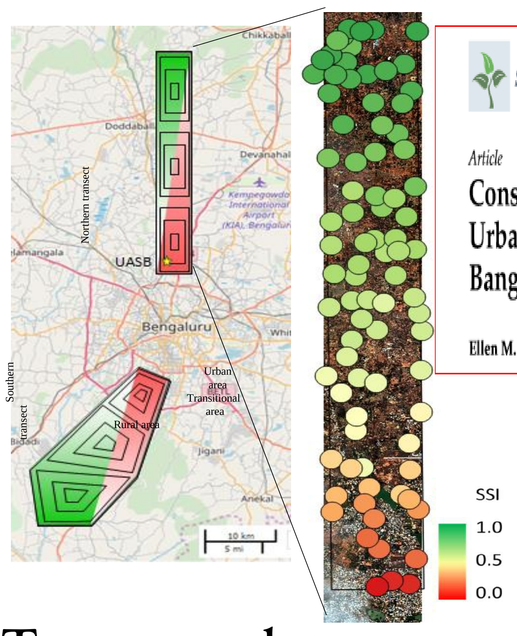
The dependence of cities on their surrounding ecosystems has long been neglected and little research has explicitly addressed the changes in agricultural land use and agricultural households associated with urban expansion and their interactions with surrounding natural ecosystems.

In this backdrop, the purpose of the research is to learn how agricultural production systems are evolving, their ability to meet food and other requirements, how these changes affect social systems, and how social and ecological systems interact where rural and urban lifestyles, aspirations, and land use collide.

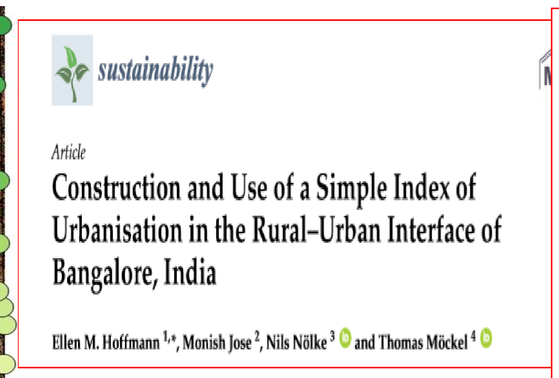
METHODOLOGY

➢The distinction of the areas is made based on the Survey Stratification Index (SSI) considering percentage of built-up area and its linear distance from the city center.

➢Bangalore was chosen as the research region for spatially explicit, real-time monitoring and analysis of changes in agriculture related to urban expansion and their interactions with neighboring ecosystems.



Two research transects across the rural-urban interface of Bangalore

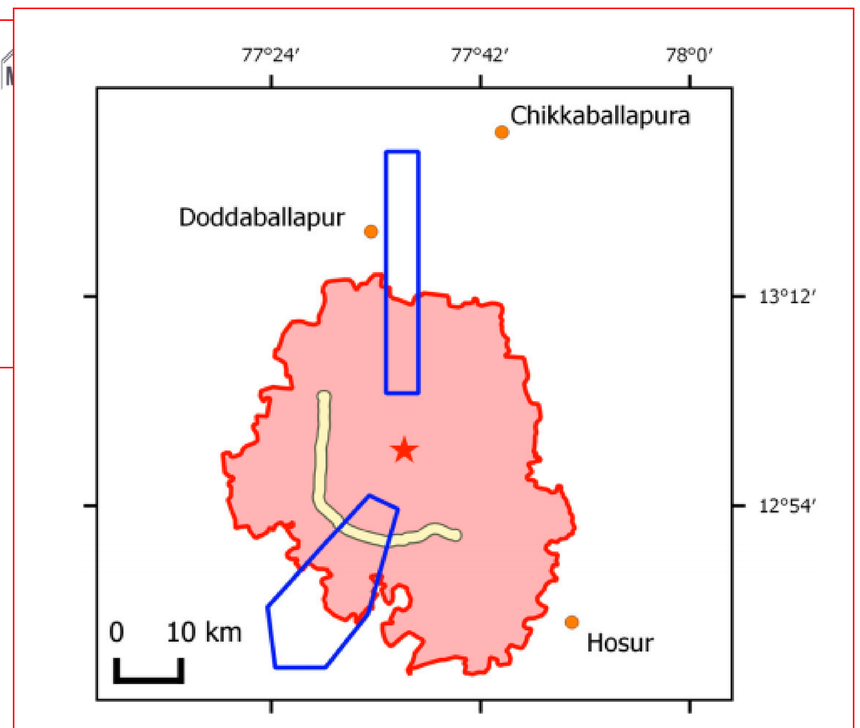


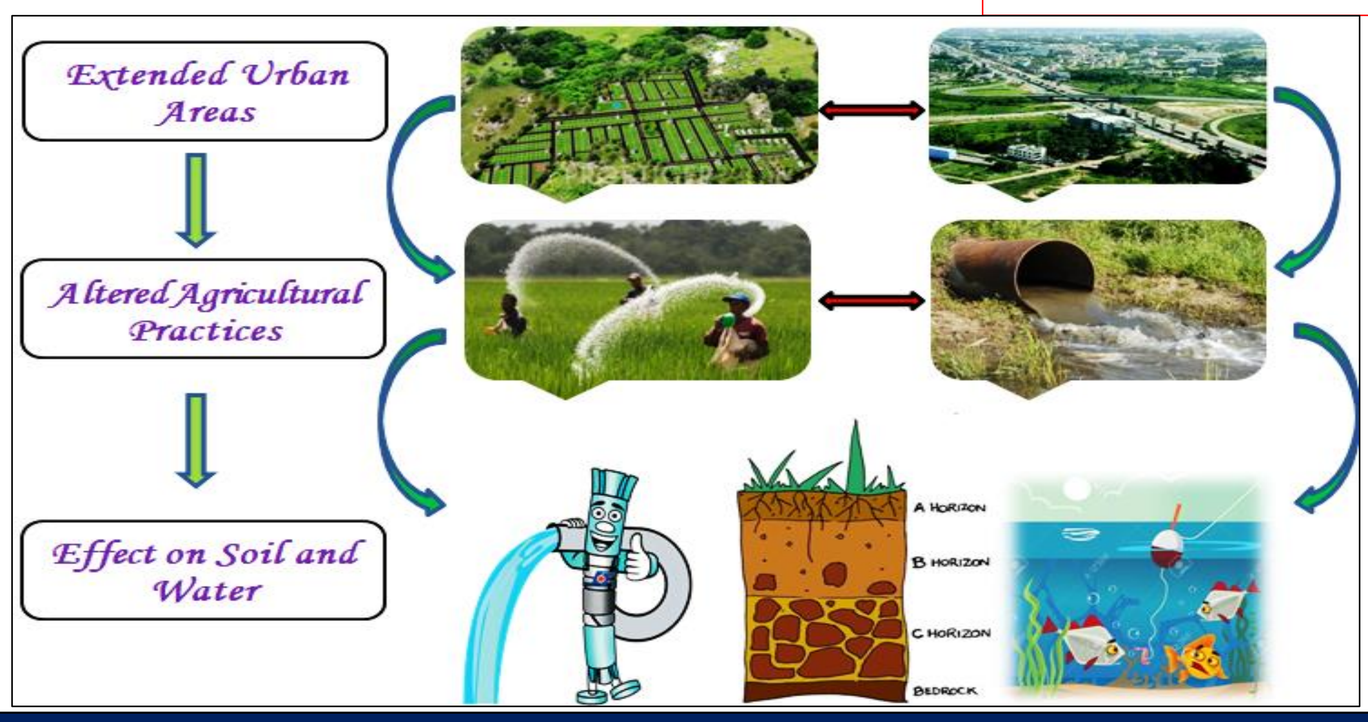
sustainability

Article

Construction and Use of a Simple Index of Urbanisation in the Rural–Urban Interface of Bangalore, India

Ellen M. Hoffmann [1,*], Monish Jose [2], Nils Nölke [3] and Thomas Möckel [4]





Impact of urbanization on Agriculture people livelihood in the rural-urban interface of Bangalore

DISCUSSION

- ✓ As a result of urbanization, commercial/ input demanding crops tend to deteriorate soil qualities and create an imbalance in nutrient availability.
- ✓ With respect to household livelihood security, urban households fared better than households in transition and rural areas.
- ✓ Area under settlement is higher in the north
- ✓ Agriculture is higher in the south
- ✓ Plantation, open/scrub land & fallow land is similar

SUMMARY

- ✓ Develop and promote 'Crop Specific Multi-Nutrient Mixed Fertilizers and 'Soil test-based fertilizer recommendations which are critical for the long-term development of the agricultural landscape.
- ✓ Issues and concerns that need to be studied in depth have emerged as study outcomes that are critical for the long-term development of the agricultural landscape.

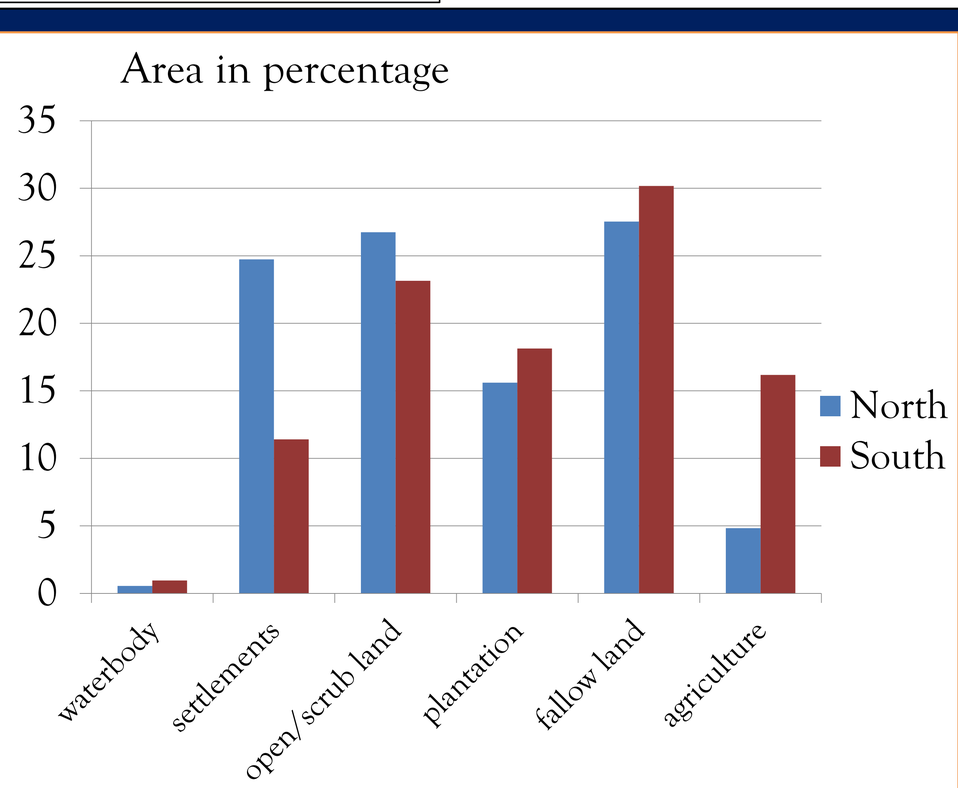


Fig. Comparison of land use/land cover across North & South transects

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