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Shrinking greenery,

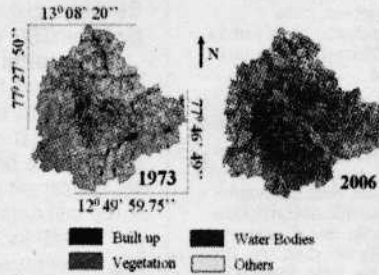
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DH NEWS SERVICE

BANGALORE: The worst fears about the Garden City's once salubrious temperature rising beyond comfort levels appear to be coming true.

(A recent study by the Centre for Ecological Sciences, IISc, has revealed that the temperature has shot up by an alarming three degrees in the past decade alone!

The study, conducted by scientist Dr T V Ramachandra and research scholar Uttam Kumar has cited the loss of vegetation and water bodies and rise in anthropogenic pressure as the prime factors behind the temperature rise.)



Alarm bells:

Satellite images show a comparison of the City in 1973 and 2006. The green cover has been encroached upon by buildings

According to the study, the City's green cover has shrunk by 32 per cent during 1973 to 1992, and by 38 per cent till 2002.

"We have lost about 25 per cent of our vegetation over five years (2002-2007) alone, pushing the City to the brink," Dr Ramachandra told *Deccan*

Herald. The study of Land Surface Temperature (LST), using modern tools like remote-sensing data and normalised difference in vegetation index (NDVI), was done by conducting a field survey of the City divided into eight zones based on eight directions.

Increase in vehicular and

J50 lakes hot up City

industrial emissions and anthropogenic heat discharge due to energy consumption are some of the factors that rule any city's temperature. "But it is the water and the vegetation which play a significant role in determining LST.

Our study shows that the temperature has dropped in City areas where there are wetlands or vegetation," said Dr Ramachandra.

For the study, the City was classified into commercial, industrial, residential and open ground zones.

Commercial, industrial and residential lands exhibited the highest temperature followed by open ground. Temperature was comparatively low

around water bodies and areas with vegetation. Places like Lalbagh, Hebbal and IISc were found to be cooler than other parts of the City.

The study shows that there has been 466 per cent growth in the City's sprawl over the last 35 years (1973 to 2007). "As land is converted, it loses its ability to absorb rainfall. In some pockets of Bangalore, urbanisation has increased runoff 2 to 6 times over what would occur on natural terrain," he said.

Increased runoff results in lower groundwater table. The study has suggested immediate restoration of lung spaces and water bodies.