

Presented at



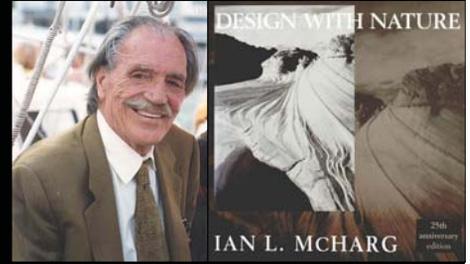
Auroville Green Practices

Seminar and Site Visits
26-28 August, 2010

An aerial photograph of a coastal area. The image shows a mix of green fields, brown patches, and a sandy beach along the right edge. The text 'Ecological Landscaping' is overlaid in white. In the bottom left, there is a red horizontal line above the text 'Prashant Hedao Consultant'. A small white outline of a map of India is visible in the bottom right quadrant of the image.

Ecological Landscaping

Prashant Hedao
Consultant



“The shaping of land for human use ought to be based on an understanding of natural processes.” – Ian McHarg (1920 – 2001)

Understanding Landscapes

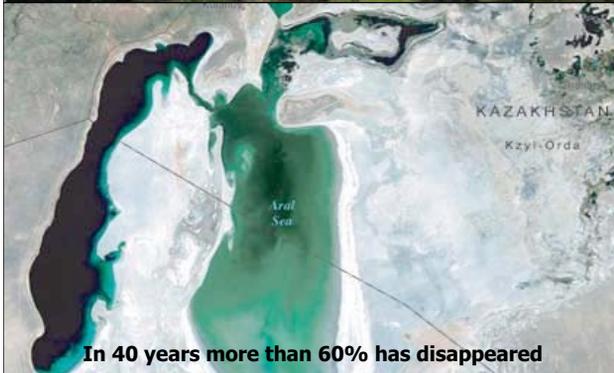


Machu Picchu, The Lost City of Incas, PERU

Shaped by Natural Forces

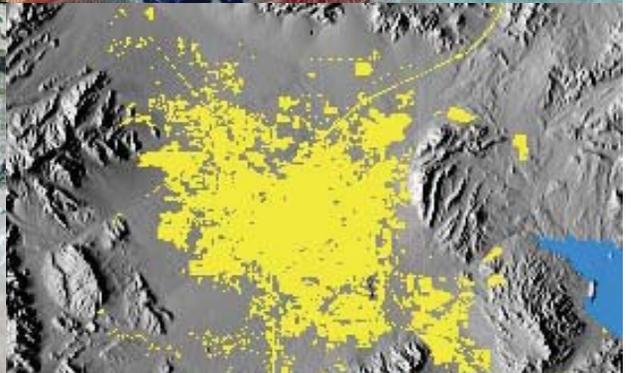


Sabkha / Sand dunes, Abu Dhabi UAE



In 40 years more than 60% has disappeared

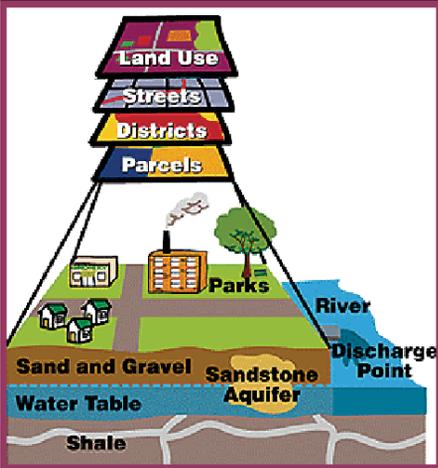
Human impact :Death of Aral



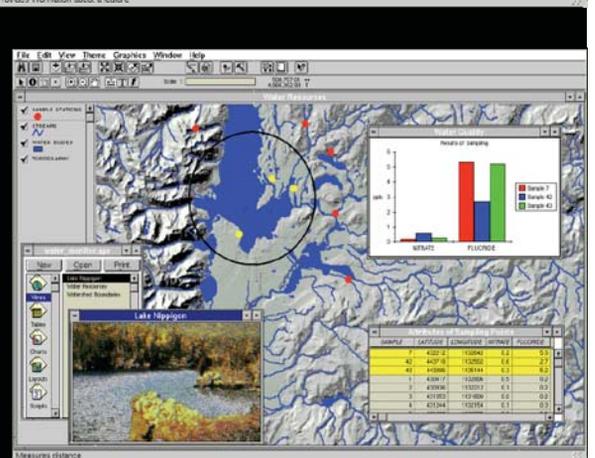
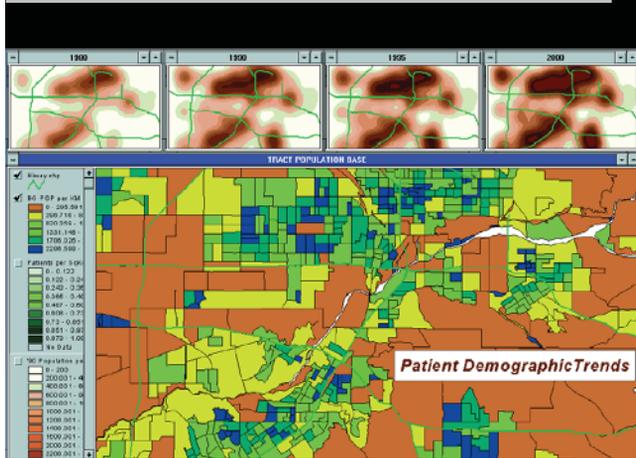
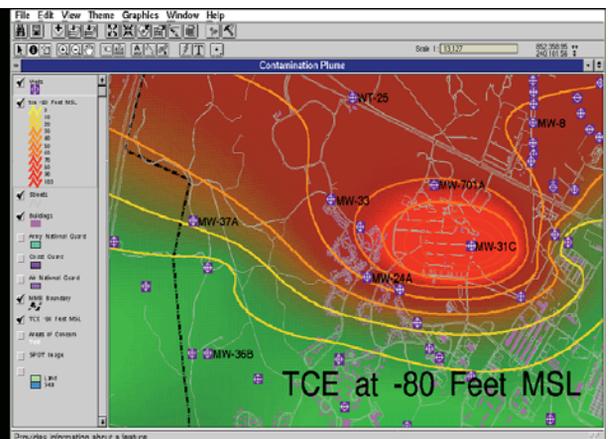
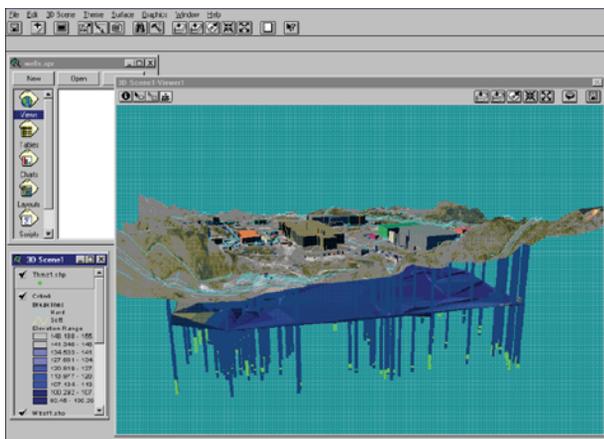
Expanding Las Vegas

1995

Geographic Information Systems (GIS)



A method to visualize, manipulate, analyze, and display spatial data



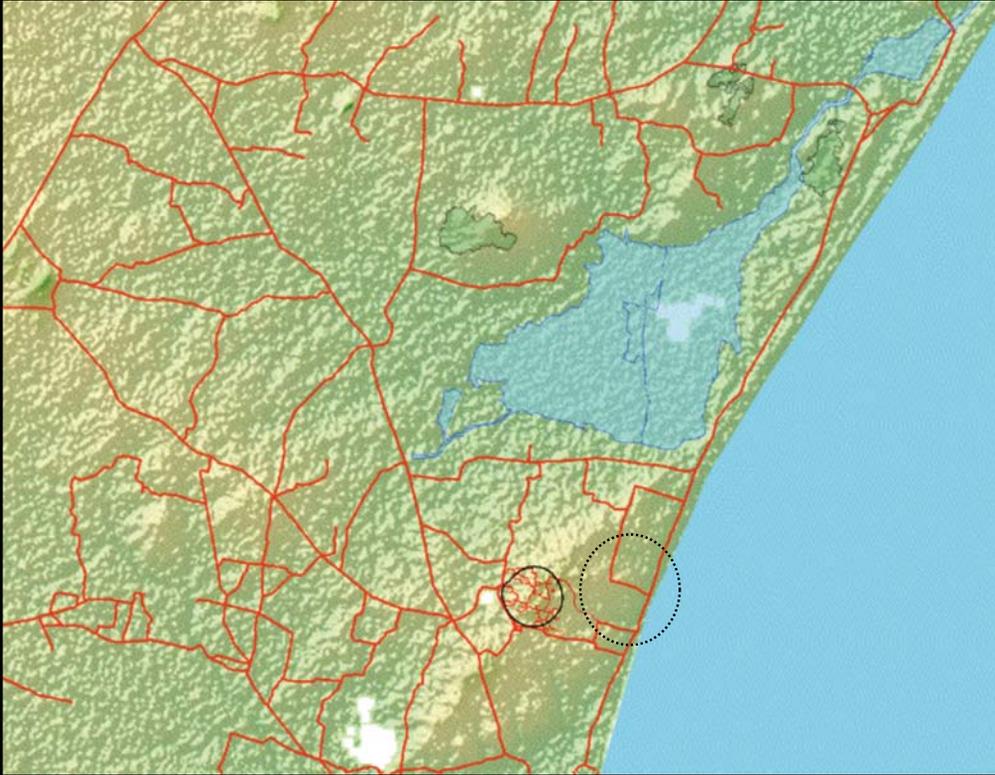


Planning work at Auroville – local & regional

Auroville – extended bioregion

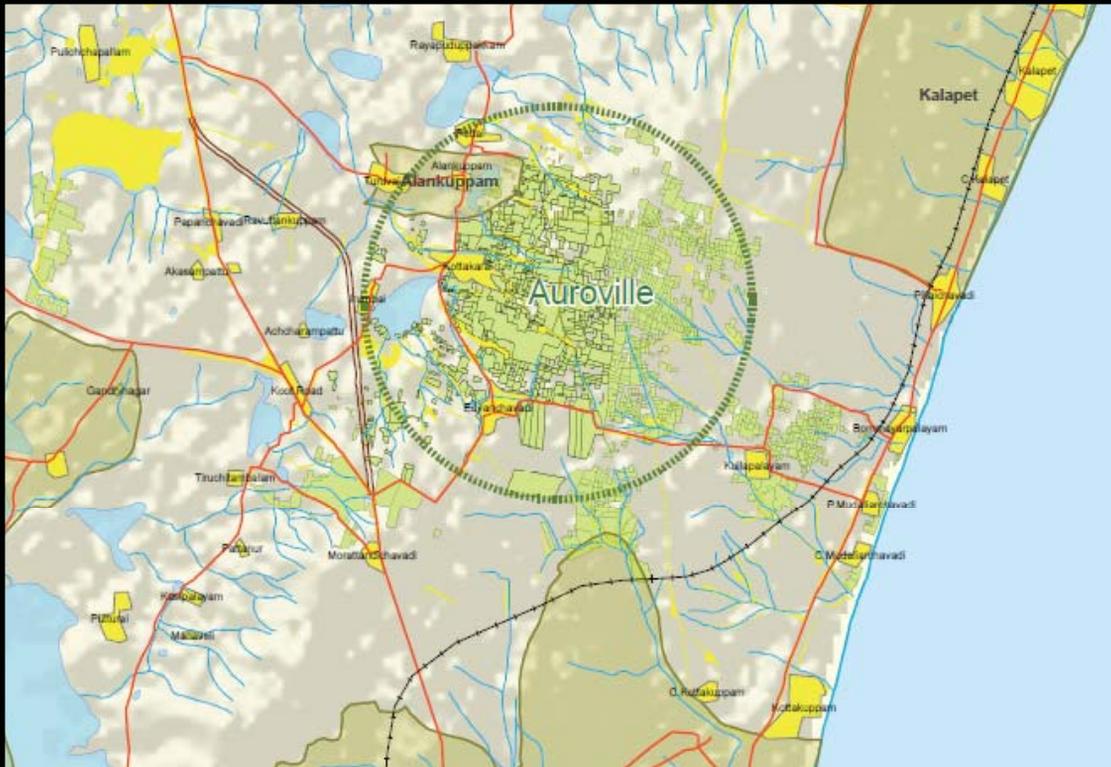


DEM – Regional Context

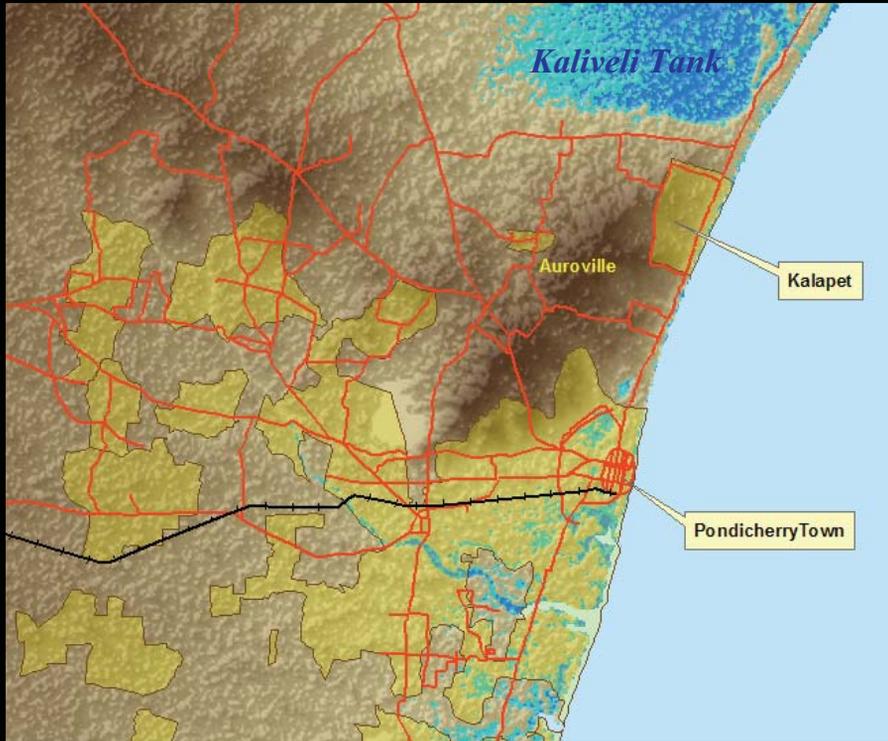


SOURCE: Topography – Shuttle Radar Topography Mission (SRTM – NASA)

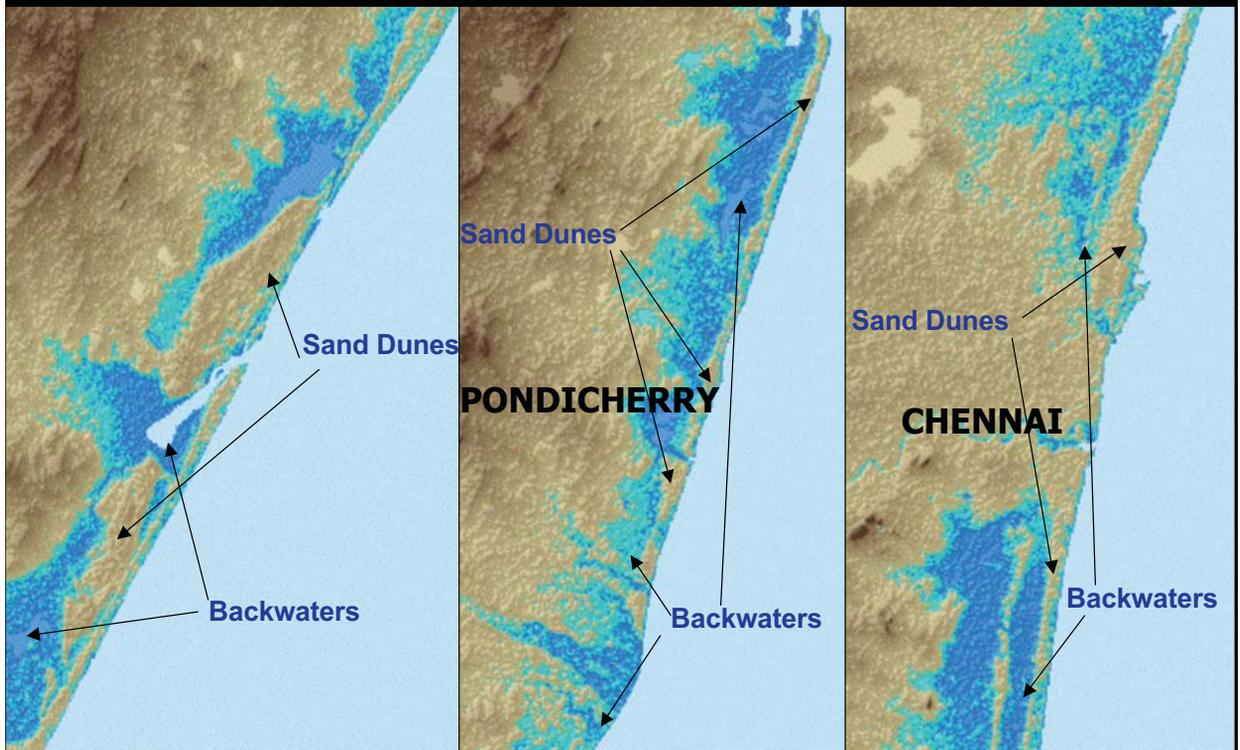
Auroville – extended bioregion



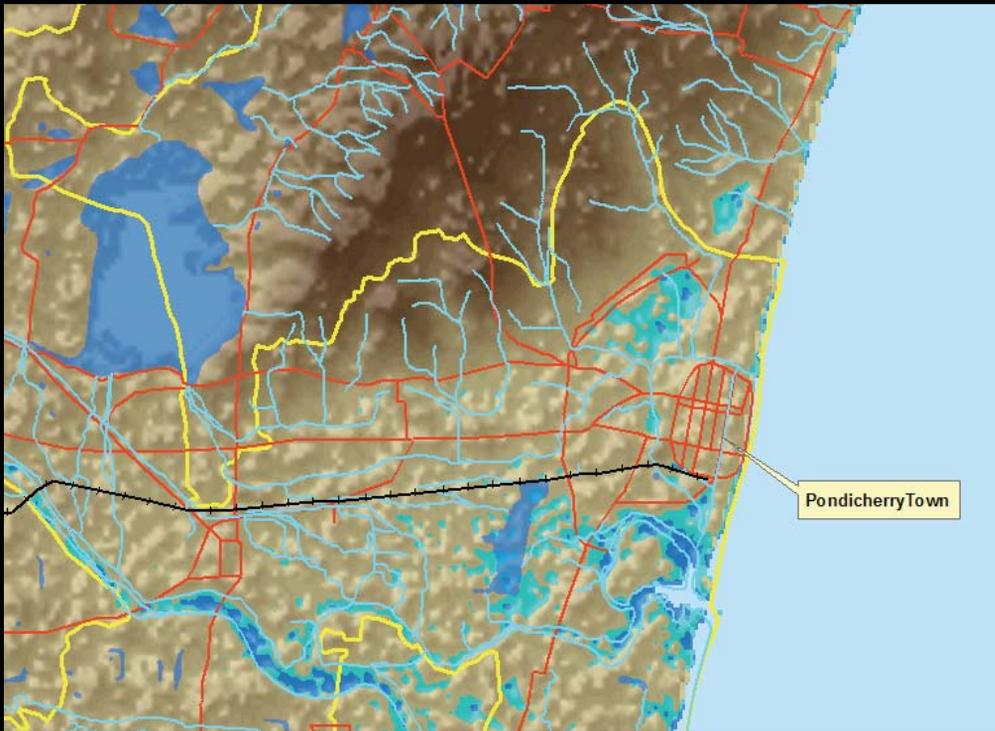
Pondicherry region – terrain



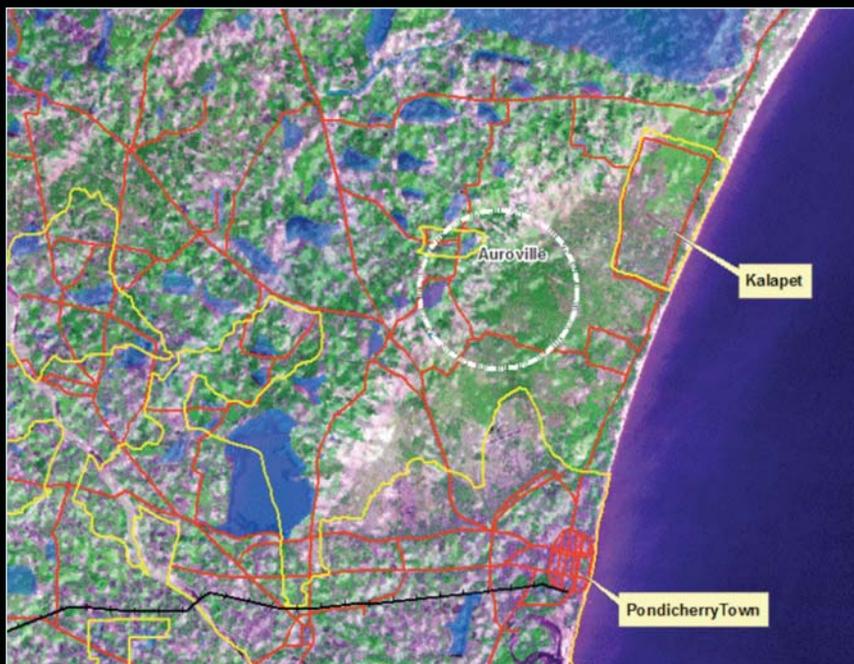
Overview – General terrain along Coromandel coast



Pondicherry Town Area- Water



Change in Green Cover – 1977 to 1991



1991

SOURCE: *Global Land Cover Facility, University of Maryland / NASA*
(<http://glcf.umd.edu/index.shtml>)

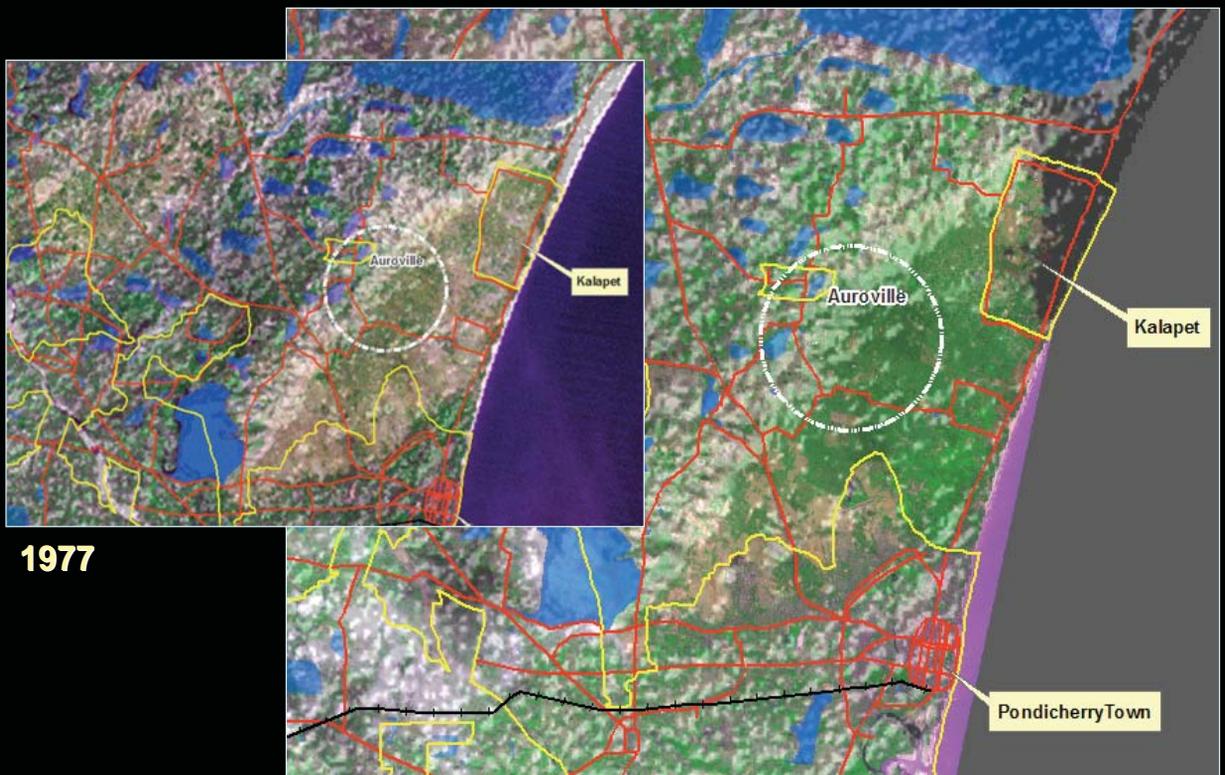
Change in Green Cover – 1977 to 1991



1977

SOURCE: *Global Land Cover Facility, University of Maryland / NASA*
(<http://glcf.umd.edu/index.shtml>)

Green Cover – 2003



1977

SOURCE: *Global Land Cover Facility, University of Maryland / NASA*
(<http://glcf.umd.edu/index.shtml>)

Pondicherry – Possible green areas

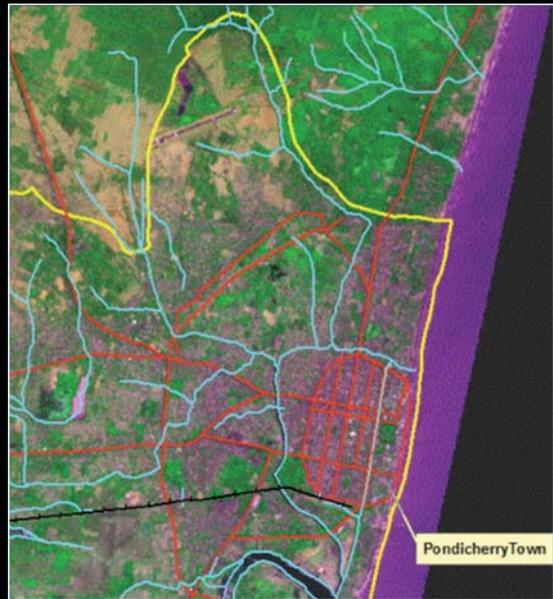


SOURCE: Pacific Disaster Center, Hawaii / DigitalGlobe

Pondicherry – Urban Expansion



1977



2003

SOURCE: Global Land Cover Facility, University of Maryland / NASA
(<http://glcf.umiacs.umd.edu/index.shtml>)

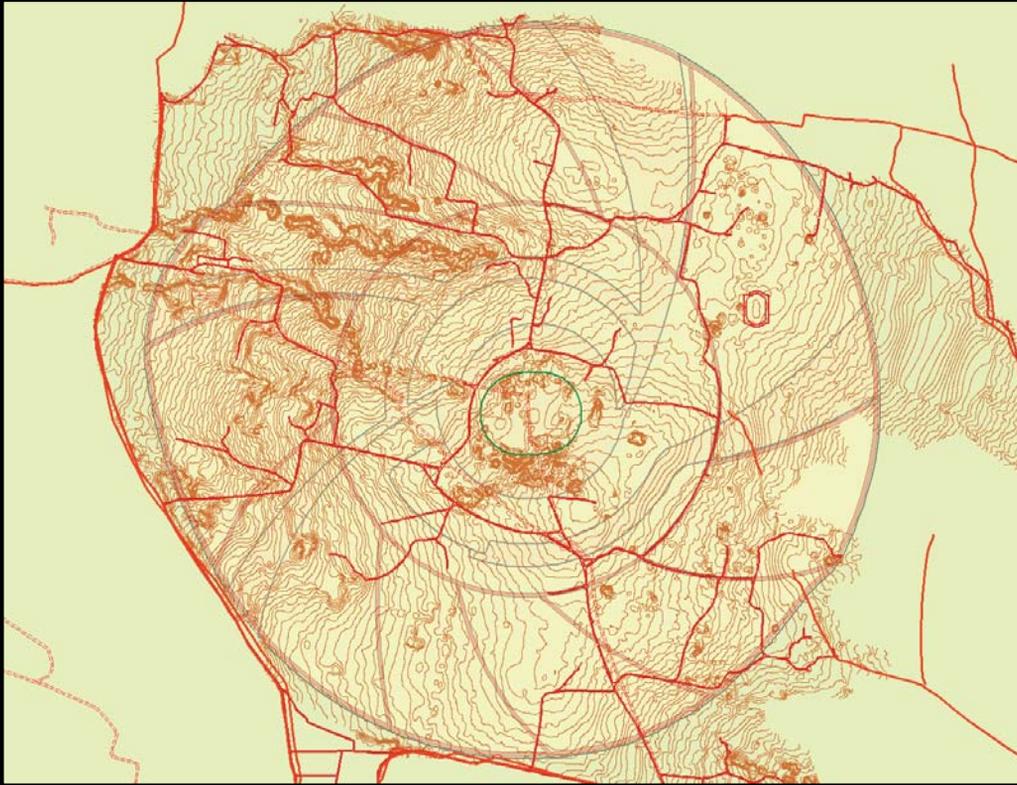
Drainage Channels – current state / possibilities



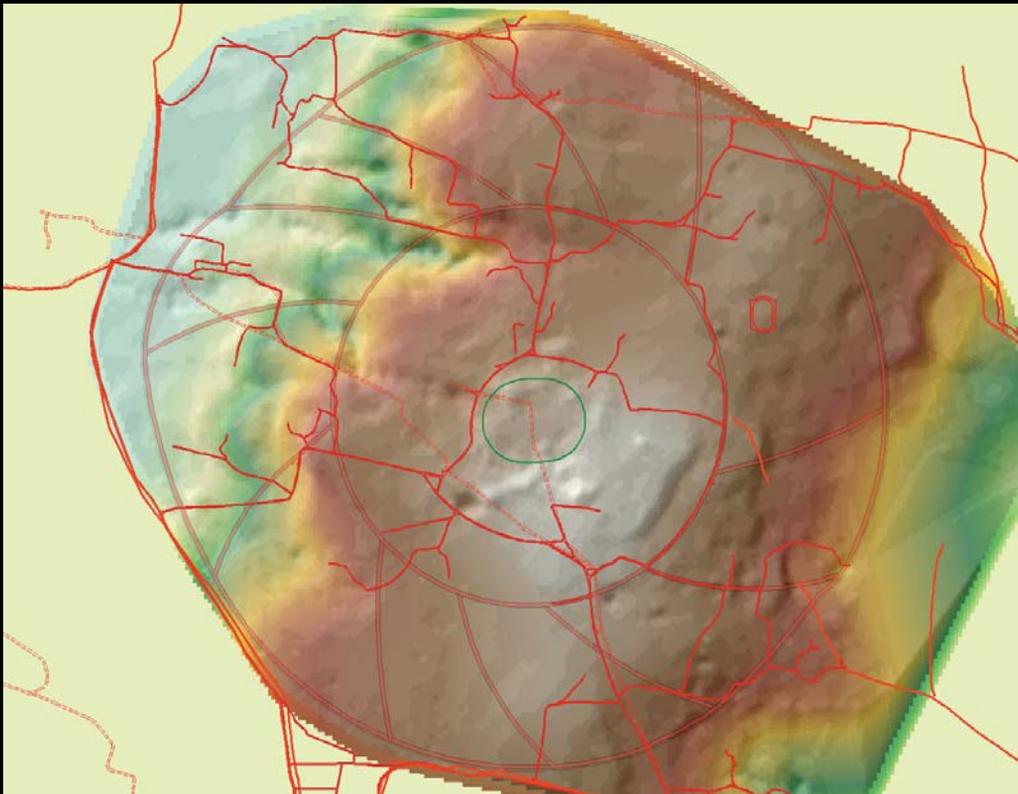
Auroville Master Plan -1968 (architect -Roger Anger)



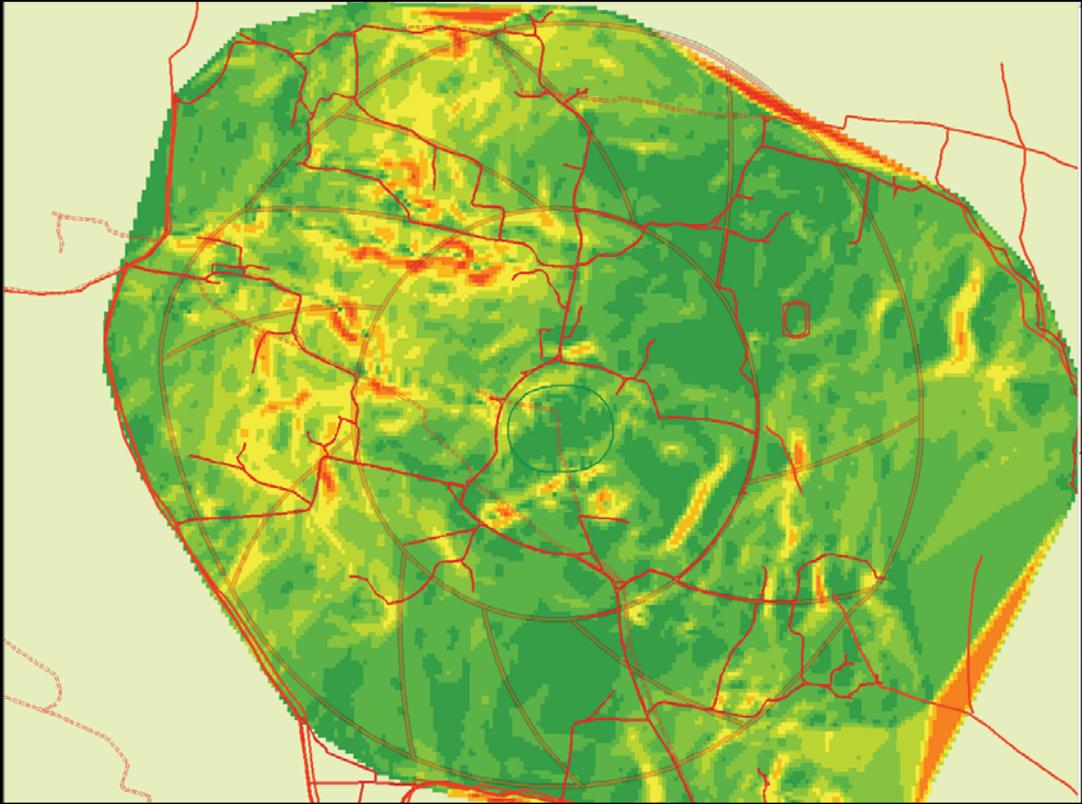
Elevation Contours



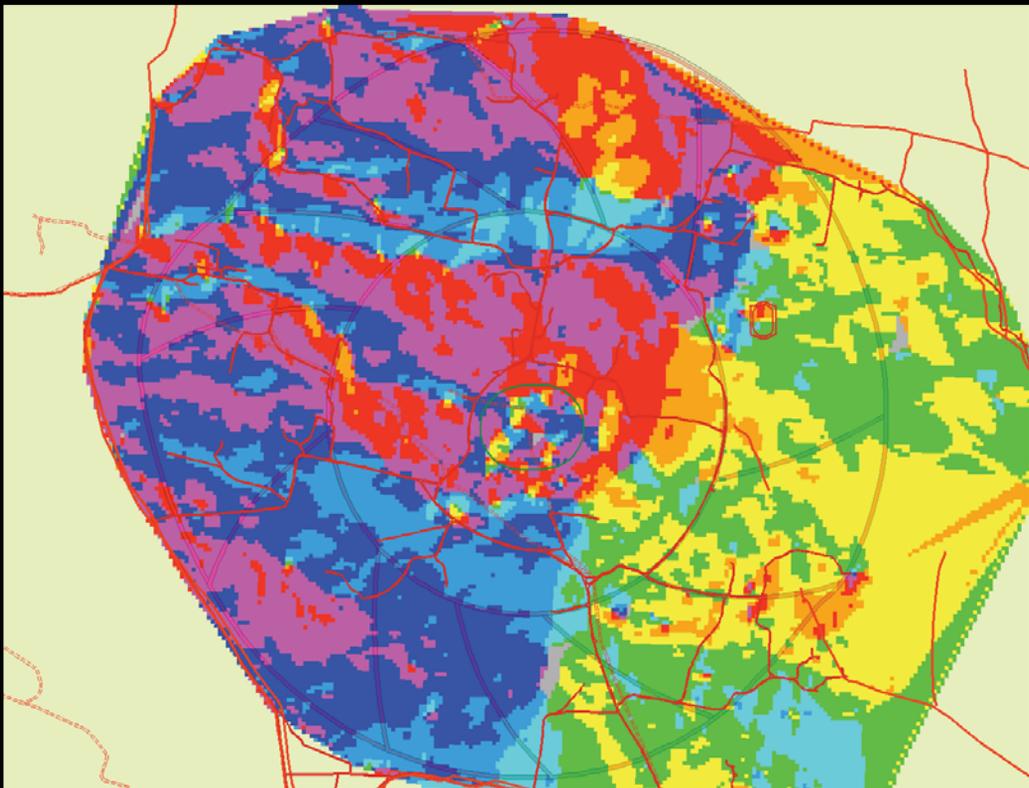
Digital Elevation Model (DEM)



Slope



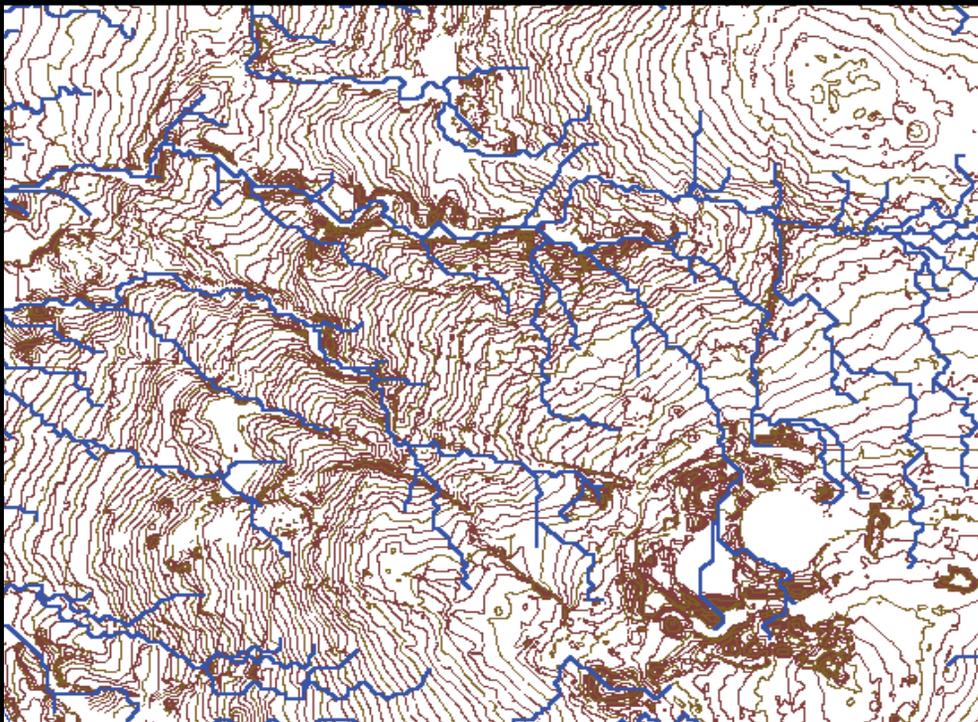
Aspect – where are the slopes facing



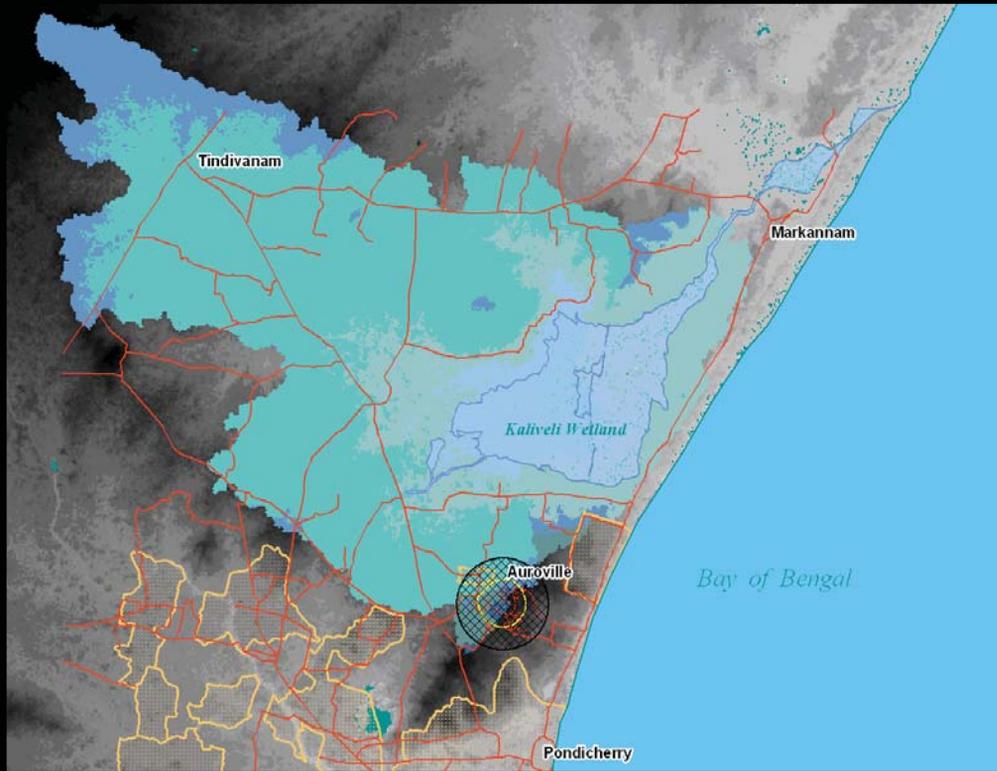
City Area – extracted waterflow/ streams



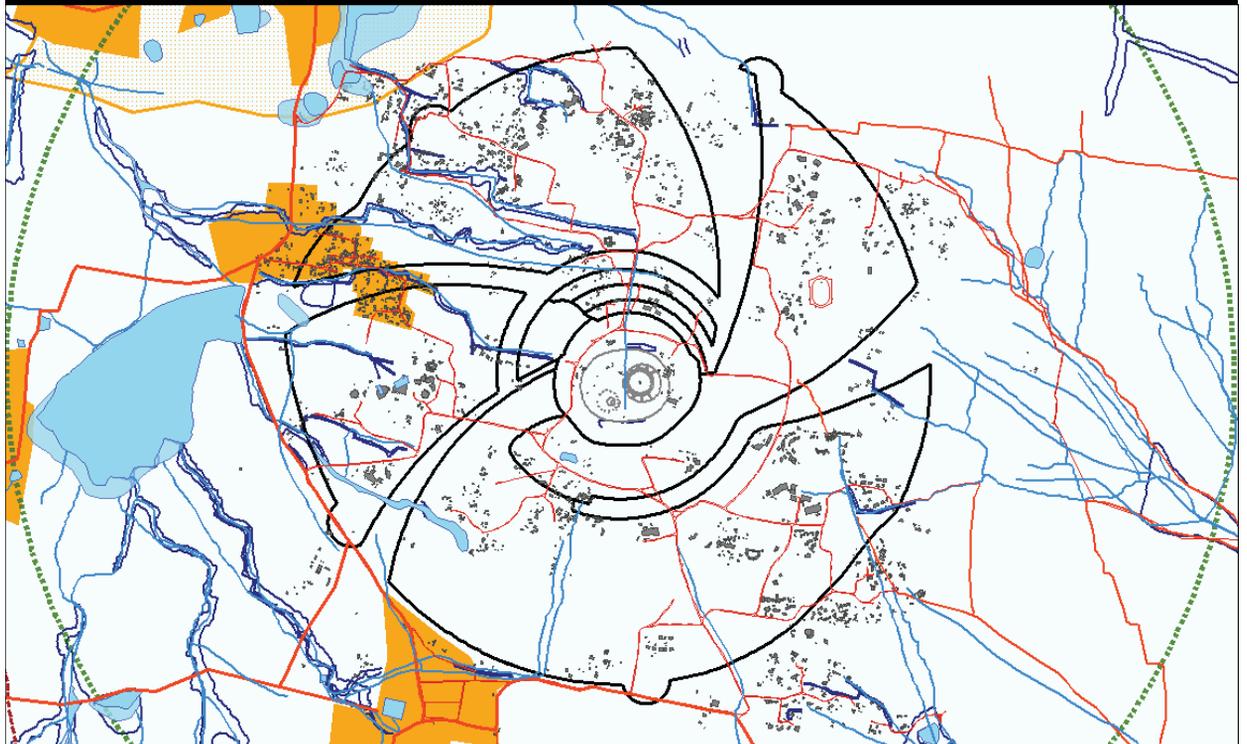
Streams - surface water flow



Watershed



City Area – current situation



City Area – land status



SOURCE: LCC / LRM / L'avenir d'Auroville

City Area – important green areas



SOURCE: Auroville Green Group

City Area – high percolation areas

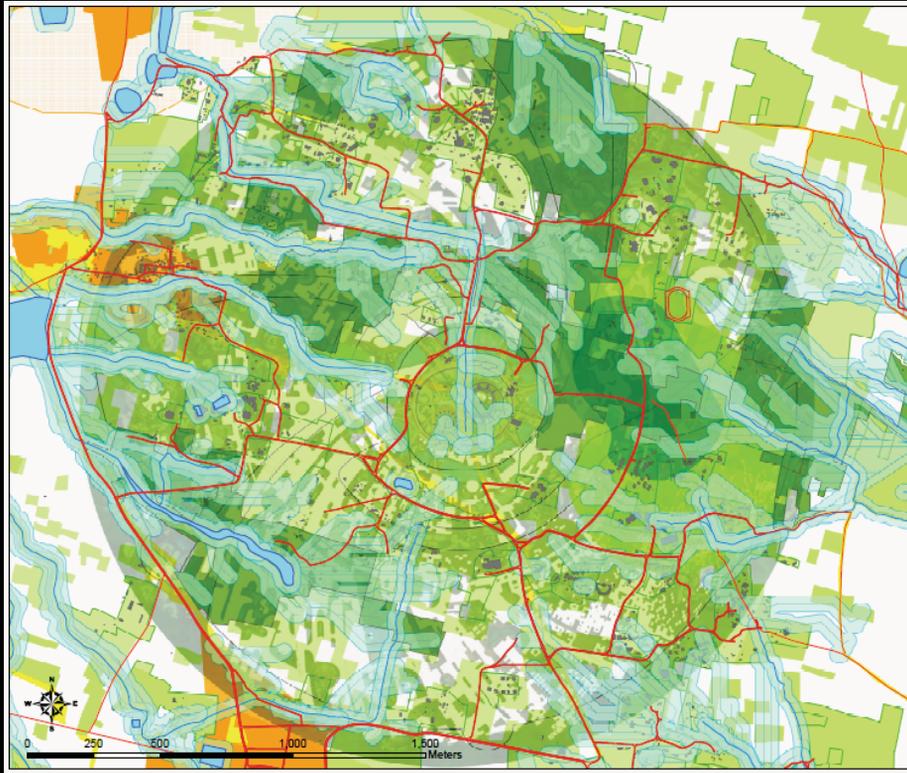


SOURCE: *Auroville Water Harvest*

Galaxy Concept



Planning – overall scenario



Ecological Landscaping

Prashant Hedao
Consultant

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