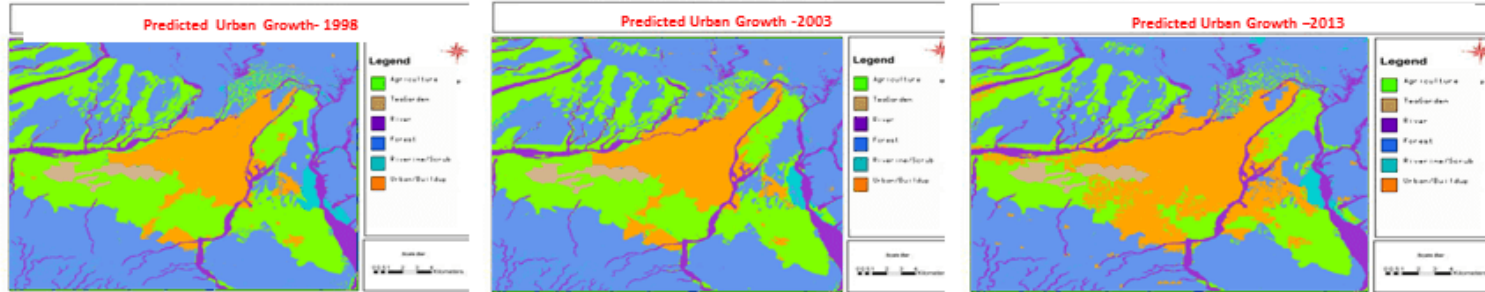# URBAN SPRAWL ANALYSIS

Objective: To develop a model for prediction of urban growth.

Assumption: Urban areas are organic entities.

Predicted Urban Growth- 1998

Predicted Urban Growth -2003

Predicted Urban Growth –2013

MODEL DESCRIPTION

Conclusions:

• The developed model is proved to be useful for determining the spatial growth in future with the current pace of growth spatially.

• Organic CA is used successfully in this study for predicting the urban growth. Developed model has shown reasonable accuracy +5.09% for predicted 1998 and -15.09% for predicted 2003.

• For increasing further accuracy of future predictions, integration of socio-economic parameters in prediction models is necessary.

• CA integrated with GIS can be used effectively for modeling urban growth.
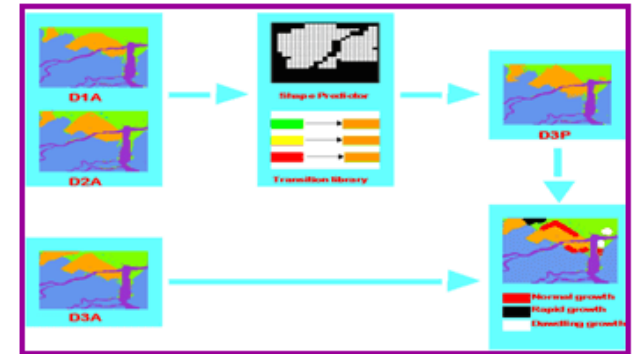
Accuracy of Prediction			
Year	Predicted Area (Sq Km)	Actual Area (Sq Km)	Error Percentage
1998	80.72	76.81	+5.09%
2003	81.23	95.67	-15.09%

Spatial growth dynamics of Dehradun urban area

Objective: Directional and distance Based analysis of rapid urban growth of Dehradun.

Data Used: Landsat TM 1987, IRS 1B LISS II 1992, IRS 1C LISS III 1998, IRS 1D LISS III 2003 IRS P6 LISS III 2008

Conclusions:

• Monitoring of urban growth based on wind rose scheme is simple in approach, easy to understand and it gives clear view of how urban growth has taken place over a period of time in different directions as well with distance from city centre.