



# A Planning Support System for Medium Size Cities in Developing Countries

## The Case of Hamadan, Iran

### Introduction

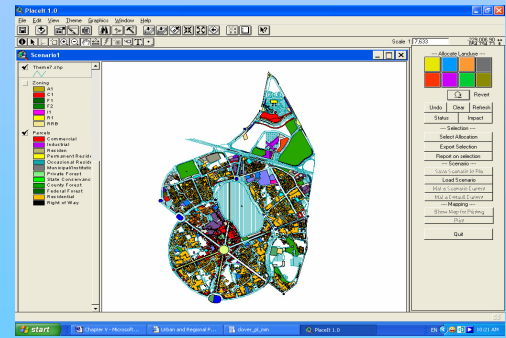
Planning Support Systems (PSS) as latest step in the field of computational assistance of planning task, are known as groupware solutions that facilitate and modify the practice of planning in a multilateral manner. Theoretically is believed that by applying the PSS, socio-technical problems of Urban Land Use Planning could be improved.

### Problems

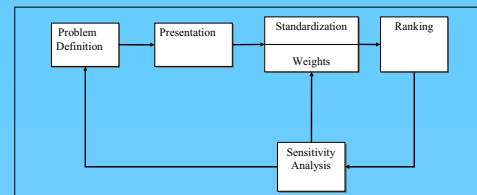


Developing of Urban Land Use Plans in traditional and centralized methods causes low internal and external qualification of outcomes. Therefore, the problems of planning could be categorized as technical and procedural groups, that consequently bring a chain of socio-economic deficits in the time of implementation.

### Constructing the multiple scenarios by applying Active Response GIS software



### Ranking the scenarios by applying a Decision Support System (DSS)



Source: Herwijnen 2006, Institute for Environmental Studies, Vrije Universiteit, Amsterdam

### Research Objective

Enhancing the process of urban land use planning towards a rational and knowledge-based manner through applying the PSS and implementing a prototype system in order to discover the essential socio-technical backgrounds for employing the system in practice.

### Methodology

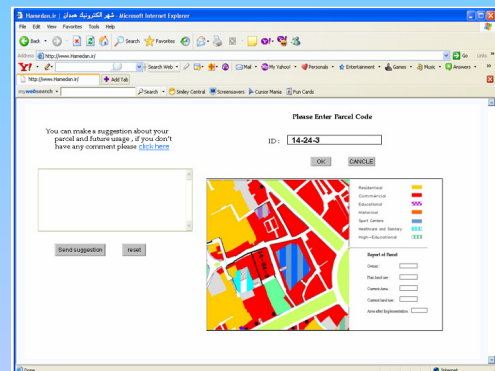
The research was done based-on a system development procedure based on four steps of Structural System Development Methodology (SSDM) as:

- Problem definition
- System analysis
- System design
- System implementation

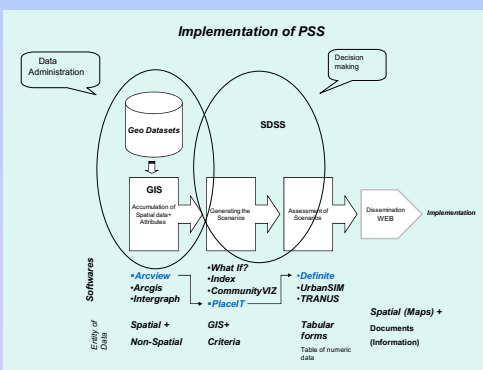
In each step relevant literatures have been reviewed and necessary interviews have been taken.

### Research Findings

### Disseminating the selected plan via the Internet and collecting the feedbacks



### General procedure of implementation of Planning Support System



### Conclusion

□ Applying the Planning Support Systems addresses the shortcomings of planning process, increases transparency of process, rationalizes the procedure of decision-making and involves more relevant stakeholders.

□ Planning Support Systems are complex, requires Data infrastructure in both spatial and Non-Spatial, competent experts and employing the ICT in efficient and sufficient manner.

□ Technical obstacles could be prevailed, particularly due to daily improvements of ICT facilities, but implementation of PSS strongly depends on political will and providing constitutional supports.