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**A Planning Support System  
for Medium Size Cities in Developing Countries:  
The Case of Hamadan, Iran**

Urban land use planning is a well-known instrument to meet the growing demand of urbanization in a systematic manner. On the other hand, urban land use planning could be considered as a complex system having wide side effects on social, economical and environmental issues. Considering the general limitations in administrative system of developing countries deficiencies in such complex process are observed affluently.

Diversity of problems in urban land use planning with multilateral effect and interdisciplinary approach reveals that the solution can not be a soft, hard, organization or human ware lonely, but also it needs a groupware solution which has become more accessible due to emerging of Information and Communication Technology (ICT).

Present research has been an attempt to promote the present process of detailed urban land use planning in Hamadan through implementing a prototype Planning Support System (PSS) which is known as state of the art in computational assistance of planning task and as a groupware solution simultaneously.

The research aims at developing of an information system, based-on four steps of Structural System Development Methodology (SSDM). In order to recognize the deficits in the present process the research has proposed a prototype system as a solution and the proposed system has been implemented the in practice to draw conclusion for study area and generalizing the results for developing countries.

The problems of present procedure have been categorized as data, procedure and decision making process-originated groups. Therefore, a planning support system combination of Geographic Information System (GIS), public participation and a Spatial Decision Support System (SDSS) is

suggested as a solution for above mentioned problems. These steps are also necessary in order to establish the proposed system through applying the present facilities consist of accessible data and constitutional capacities.

Implementation of proposed system reveals its essential steps, the potentials and limitations of such processes in developing countries. The research also refers to the socio-technical problems that should be prevailed in order to modify the present process of urban land use planning in a knowledge based and rational manner.

**Key words:** Urban land use planning, Information and Communication Technology (ICT), Structural System Development Methodology (SSDM), Geographic Information System (GIS), Spatial Decision Support System (SDSS), Hamadan, Iran.