Preparation of Database for Urban Development

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Key words: Digital cadastre; Geoinformation/GI; Spatial planning; Urban renewal;

SUMMARY

Preparation of Database for Urban Development Punya P OLI, Nepal Key words: Municipal Geographical Information System, infrastructures, metric house addressing system, cadastre data. 1. ABSTRACT Most of the municipalities of Nepal were formed prior planning of whole area. The land use plans are usually prepared to the settlements where it is growing and development taking place. It is required the detail data base/mapping of all the area of municipality for urban development and provision of services. The spatial coverage of Nepal is topographical maps at the scale of 1:25,000-1:5,000 and cadastral map coverage of private land at the scale of 1:500- 1:2,500 which is insufficient for urban planning and development. The objectives of preparation of urban database or Municipal Geographical Information System(MGIS) is to carry out survey for data base including topography, infrastructures, socio economic situation, metric house addressing system, land and building ownership situation and link these data to tax system of the municipality. These data base will be use for sustainable urban development. Some time, these data base will contain simply topography and infrastructural situation for land use zoning of town areas. These activities are being carried out in almost all municipalities and land pooling programmes in Nepal. Most of the people in Nepal live in rural areas and only 17% of people lives in city areas with urban population growth of 3.38% per annum (Population Census, 2011. It is planning to develop additional 40 towns in addition to the existing 57 municipalities in different location of the country in order to avoid the developing megacities. The largest city of Nepal, Kathmandu has population of about 1.07 million. Most of the municipalities have now medium high resolution database. The map and data base provide the basic information for sustainable urban planning. It assisted to expedite the urban planning and sustainable development as well as urban data base preparation system in Nepal. It is generally carried out by public private participation on the basis of high resolution satellite imagery or aerial photography, ground surveys and existing data like cadastre data, infrastructural drawings. In this article, it is briefly described the objectives, contents of data base, methodologies the of data acquisition for MGIS and its contribution to sustainable urban development in Nepal. 2.

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