SECTION C

RELEVANCE OF ACCURACY OR PRECISION IN LAND USE PLANNING

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Many have an idea that land use planning is land use mapping. Land use planning involves the scientific study of the environment of LAND, WATER AND MAN. It involves the study of forests, present land utilization, soils, geology, rainfall run off, ground water, hydro-power, etc. In the context of man's ancient and present culture of human settlements, both in urban and rural areas and suitably chamging the present land utilization, based on land capability for sustained growth.

The Sri Lankan experience on the Mahaweli Project which is a good example for development planning in developing countries has indicated to us the limitations in the use of aero space surveys. Satellite imagery is only suitable for reconnaisance surveys, while aerial photography is suitable for semi-detailed and detailed surveys. Therefore aerial surveys play the vital role in development planning, while satellite imagery is suitable for reconnaissance level surveys only. The basis of a land information systems is a uniform spatial referring system, for the data in the system, which also facilitates linking data within the system, with other compatible land related data, on similar scales that could be related.

Today most of the information on land, water and man is available in conventional ways such as maps at different scales with variable reliability. When we use digital system of storing and retrival we have to use computers. The information of spatial units are a hundred fold for a tenfold increase of scale. For each parameter within the major units of LAND, WATER AND MAN which have to be catered to. There for a country like Sri Lanka of 65,600 sq. kilometers its inputs are of the order of 140 million spatial units and each parameter having 25 units at least.

This is the imensity of the problem in having a land information system for a computer to cater to the different requirements. The major part of the expenditure would be in quantifying the units to be fed to the computer as compatible inputs. They would have to cater to different levels of planning interests. This as one could see is staggering.

The question should therefore always be asked whether all this is necessary and economic. It would certainly be necessary for some, but ridiculous for use in others.