ABSTRACT

KEYWORDS: Land valuation, Governance, Infrastructure development, Livelihood.

In many developing countries infrastructure development projects are not sustainable due to land valuation conflicts. Mostly, land valuers have assessed land value based on their experiences and without inference i.e. they carry out subjective land valuation.The detailed spatial analysis of the parcel is not considered for land valuation. Project affected people may not expect better livelihood from unsustainable infrastructure development. This study aims to develop the land valuation model for land acquisition in infrastructure development from livelihood perspective.

Desk research followed by literature review indicates that policy level, operation level, management level, external factors and review process are key evaluation areas for assessing land valuation and management process in reference to good land governance in infrastructure development. In order to assess the land valuation and management process, an assessment framework is developed within these evaluation areas. The qualitative and quantitative research approaches were used to collect primary and secondary data in a case study area at Kathmandu Terai Fast Track Road Project in Makwanpur district, Chatiwan VDC of Nepal. Household survey, key informants' interviews, focus group discussion and field observation were conducted to collect primary data while the relevant documents such as detailed project report, property valuation document and spatial data (cadastral data, image etc.) were also collected for the study.

This study indicates that there was no good coordination among Fast Track road project officials and various stakeholders of Fast Track road project. The interaction meeting was held only with local leaders during land valuation and compensation in Chatiwan VDC. It is found that there was no active participation of project affected families. The efficiency of Kathmandu Terai Fast Track Road Project seems to be weak as procedure of payment of compensation at Chatiwan VDC was time consuming for project affected land owners. It is also found that an access to information at local level was very weak. Based on project report, lack of good conditioned road obstructs them from job opportunities, higher productivity and access of market for product. The literacy rate in the case study area was also very low. From an assessment of land valuation and

management and requirement analysis, it is found that appropriate land valuation model is necessary for land acquisition in infrastructure development. It is also found that the number of land valuation criteria is indefinite. Land value broadly depends on its location but their consideration into valuation process is not clear. This gives emphasis on the importance of spatial factors in decision making. Therefore, GIS is increasingly more useful in decision making.

Finally, land valuation model is developed for land acquisition by using Geographic Information System with Analytic Hiearachy Process and introduction of governance and livelihood aspect in land valuation and management process in infrastructure development. The model has used a number of land valuation criteria which are also common for other infrastructure development. The weights are determined for each criterion to develop a land valuation model for land acquisition and compensation in infrastructure development.The developed model is more relevant to project developer, government officials from various sectors, land valuation and management experts, land administration professional, project affected families and academia.The developed model is scientific and appropriate for land acquisition in infrastructure development as it is developed taking common criteria applicable to various infrastructure development and applying DFID and UNDP livelihood approaches.The model is developed with participatory approach and is transparent. The participation of the various stakeholders of infrastructure development supports in minimizing land valuation conflicts and supporting for livelihood which ultimately support for sustainable infrastructure development. The land value in the form of model value is determined with objective analysis of parcel quality and visualized in the form of land valuation map.