Rapid Strategic Consensus Building in Land Readjustment in Kabul

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Abstract : Kabul population has been growing continually since 2001 and reaching six million in 2025 due to the rapid inflow from the neighboring countries. As a result of the population growth, lack of living facilities supported by infrastructure services is becoming serious in social and economic aspects. However, about 70% of the city is still occupied illegally and the government has little information on the infrastructure demands. To improve this situation, land readjustment is one of the powerful development tools, because land readjustment does not need a high governmental budget of itself. Instead, the method needs cooperation between stakeholders such as landowners, developers and a local government. So it is becoming crucial for both government and citizens to implement land readjustment for providing tidy urban areas with enough public services to realize more livable city as a whole. On the contrary, the traditional land readjustment tends to spend a long time until now to get consensus on the new plan between stakeholders. One of the reasons is that individual land area (land parcel) is decreased due to the contribution to public such as roads/parks/squares for improving the urban environment. The second reason is that the new plan is difficult for dwellers to imagine new life after the readjustment. Because the paper-based plan is made by an authority not for dwellers but for specialists to precede the project. This paper aims to shorten the time to realize quick consensus between stakeholders. The first improvement is utilizing questionnaire(s) to assess the demand and preference of the landowners. The second one is utilizing 3D model for dwellers to visualize the new environment easily after the readjustment. In additions, the 3D model is reflecting the demand and preference of the resident so that they could select a land parcel according to their sense value of life. The above-mentioned two improvements are carried out after evaluating total land prices of the new plans to select for maximizing the project value. The land price forecasting formula is derived from the current market ones in Kabul. Finally, it is stressed that the rapid consensus-building of land readjustment utilizing ICT and open data analysis is essential to redevelop slums and illegal occupied areas in Kabul.

Keywords : land readjustment, consensus building, land price formula, 3D simulation

Conference Title : ICLMED 2016 : International Conference on Land Management and Economic Development
Conference Location : Montreal, Canada
Conference Dates : July 14-15, 2016