

AN ANALYSIS OF THE APPLICABILITY OF LAND READJUSTMENT TO THE REHABILITATION OF INFORMAL SETTLEMENT IN JALALABAD CITY

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I. INTRODUCTION

There are different push and pull factors behind the increasing demand for developing land and housing in urban areas, such as rural-urban migration, population growth, natural disasters, expectations of jobs and urban facilities¹. In Afghanistan, many cities are facing the challenge of relocating urban people in well planned and environmentally safe areas. People living in informal settlements are deprived of the security of land tenure, land development rights and land use rights².

Although many urban areas have been developed by upgrading informal settlements over a long period, the traditional mainstream approaches to the development of informal settlements appear to be inadequate in solving or alleviating social, urban space and infrastructure problems³.

The objective of this study is to evaluate the application of a land readjustment (LR) replotting system instead an upgrading of informal settlement. This research will undertake the following steps: 1) evaluation of land use in the case study areas; 2) investigate land governance (policies, process and institutions); and 3) analyze public participation in the infrastructure development. For this study, the eastern regional hub of Jalalabad City, Afghanistan, has been selected.

II. ANALYSIS METHOD

The analysis consists of the following three processes:

1. Informal settlements in the case study areas were categorized, and their land uses were analyzed.
2. The important level of LR replotting application to an informal settlement was analyzed by using Multicriteria Analysis. Land governance was evaluated through a questionnaire survey submitted to urban and regional planners.
3. Public participation, contribution and willingness of the residents to join infrastructure improvement projects, were analyzed through a household questionnaire survey in the case study areas.

III. RESULT AND DISCUSSION

1. Informal Land Use

Figure 1 shows an aerial photograph of informal settlements in Jalalabad City. Eighteen informal residential areas are colored in yellow. These can be classified into four categories⁴, 1) settlements in which most houses are built on privately owned land, 2) squatter settlements on public land, 3) settlements in which most houses are built on grabbed land or land bought from land grabbers, and 4) settlements in which there are ambiguous legal situations. The areas colored in red are the test areas.

Table1 shows land use in the built up area of Jalalabad City. Planned residential areas cover 25.2% and unplanned (informal) residential areas cover 29.9%.

Figure2 shows the areas (ha) of the eighteen informal settlements and population density (People/ ha). The most dense site has 1,382 (People/ha) and the least dense site has 32.9 (people/ ha).

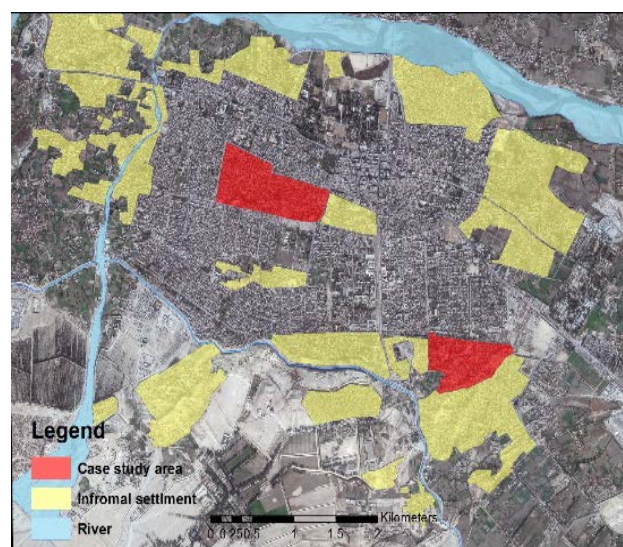


Figure 1. Map of the informal settlement in Jalalabad City

Table2. Existing land use in Jalalabad City

| Land use type | Sq. km | % |
|--------------------------|--------|-------|
| Residential (Planned) | 4.8 | 25.2% |
| Residential (Unplanned) | 6.2 | 29.9% |
| Commercial | 0.8 | 4.7% |
| Institutional | 2.2 | 12.7% |
| Industrial | 0.9 | 4.8% |
| Transport | 0.7 | 3.9% |
| Roads/streets | 3.6 | 18.8% |

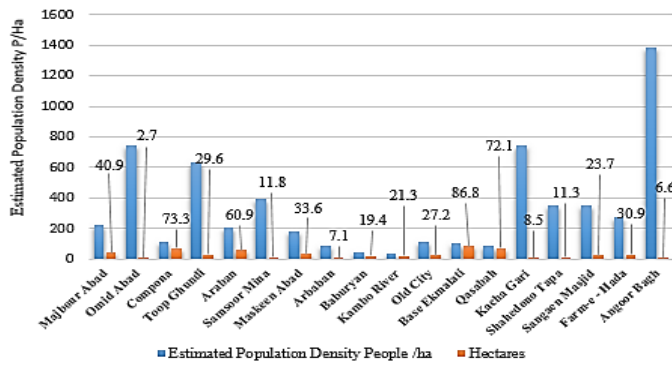


Figure 2. Land areas and population densities

1. Land Governance

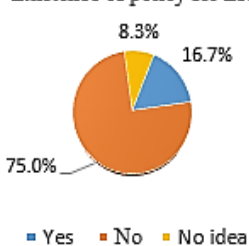
Table 2 shows the questionnaire respondents' opinions about implementing LR replotting in the informal settlement. The 24 respondents are experts in different governmental organizations, academic institutions and non-governmental organizations. There are many "Yes" answers. It can be assumed that LR could be a better alternative in terms of providing sustainable living space in informal settlements.

Figure 3 shows respondents' opinions about land policy, acts and laws related to LR. The left side of the figure shows that Afghanistan has not explicitly defined its LR policy. The right side of the figure shows that LR projects can be initiated on a legal basis. These results demonstrate that the government can initiate the LR programs, and prepare the LR plan, and approve the LR projects.

Table 2. Experts' opinions on LR as an alternative for upgrading the informal settlements.

| Expert's opinion on LR | Yes | No | Don't know |
|--|--------|-------|------------|
| LRS can provide land plot with access road Connecting to road network system | 83.3% | 12.5% | 4.2% |
| LRS can Provide Park and open space | 87.5% | 12.5% | 0.0% |
| LRS can increases the land value | 91.7% | 0.0% | 8.3% |
| Haphazard Sprawl will be controlled by LRS | 66.7% | 8.3% | 25.0% |
| Infomral settlement will developed by LR | 83.3% | 8.3% | 8.3% |
| Increase of economic condition | 100.0% | 0.0% | 0.0% |
| Development of planned area | 66.7% | 25.0% | 8.3% |

Existence of policy for LR



Existence of acts, law for LR

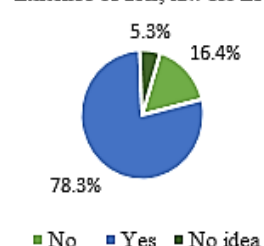


Figure 3. Respondents' opinions on land policy, acts and law.

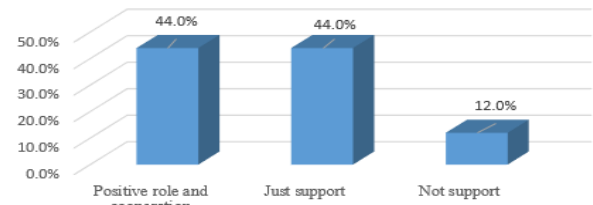


Figure 4. The contribution and willingness of the residents to join infrastructure improvement projects

2. Public Participation in Improving Living Space

Figure 4 shows the opinions of residents living in the case study areas about improving urban space. In this survey, more than 88% of the respondents said that they support the LR projects for developing urban infrastructure, 12% of the respondents said that they do not support the LR projects. Survey reveals that, in the case study areas, 2.6% of the residents have no access road, 48% have poor access road, and 12% (lack public utilities). As a result, 34.8% of the respondents said that they are ready to contribute less than 20 % of their land, 13.3% are ready to contribute more than 25% of their land and 5.3% can contribute about 50% of their land. However 46.6% could not decide.

IV. SUMMARY

The survey and analysis results are summarized as follows:

- 1) Case study areas have expanded rapidly over the past decade without effective spatial plans and with limited access to formal land and housing. There are informal settlement areas with significant infrastructure deficiencies.
- 2) Standardized land administration particularly explicit policy and, law related to LR do not exist.
- 3) The LR approach in the improvement of informal settlement might resolve the problems of the shortcoming of basic infrastructure problems by involving the separated landowners in the development areas.

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- 3) Ghada Faruk Hassan: Regeneration as an approach for the development of informal settlements in Cairo Metropolitan, 2012.
- 4) Tetra Tech ARD: Land reform in Afghanistan, Jalalabad city profile' 2013.