



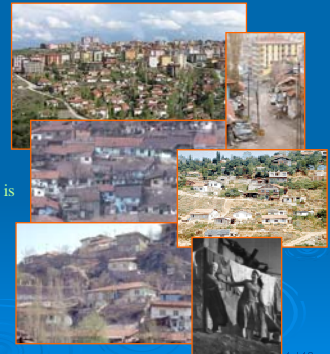
## A MODEL FOR SOLVING INFORMAL SETTLEMENT ISSUES IN DEVELOPING COUNTRIES

Bayram UZUN and Mehmet ÇETE

Karadeniz Technical University  
Department of Geodesy and Photogrammetry Engineering - GISLab  
Trabzon, TURKEY

### Slums..

- Slums are symptoms of immigration phenomenon.
- Immigration aroused as a movement from rural to urban areas in the industrialization period.
- While this action realized long before in developed countries, it is still a continuing process in developing countries.
- The existence of 'immigration' and 'slum' terms in every language is a proof that this is a global situation.



1 / 10

### Construction process of slums in Turkey

- In Turkey, urbanization accelerated in 1950's and still is in progress.
- Immigrations have been directed to the cities regarded as 'attraction centers'.
- Primary aim of the immigrants which immigrate to urban areas is having a guaranteed and permanent job and then having a shelter.
- However, because of the financial inefficiencies of the local authorities, the level and quality of the services has been low. Especially the lack of convenient dwelling areas has led to construction of the slums.
- Slums have been built especially in fringe areas and on government owned lands.
- A range of problems have been aroused in these slum areas. These slums have not basic technical and social infrastructures and led to visual and physical contamination.

2 / 10

### The process of formalizing slums in Turkey

- There were two ways to develop solution for these slums:
  - ✓ One of them was to destroy all of them.
  - ✓ The other was formalization of these illegal settlements.
- The political authority of Turkey preferred the latter and the new law put into practice to formalize illegal settlements.
- According to this law (1983);
  - ✓ All illegal settlements constructed on the government lands before the law have been included.
  - ✓ The slum residents will pay the value of the land with installments.
  - ✓ It is not allowed to allocate more than 400m<sup>2</sup> for each slum.
  - ✓ The residents having a building or land in the same municipal boundary can not benefit from this law.
  - ✓ At the end, 'title' was given for each slum by the governmental agency.



3 / 10

### The process of formalizing slums in Turkey

- These titles have not a development right. That is to say, existing slums and its lands have been formalized.
- Social and technical infrastructures have been placed to the empty areas in the region. So, technical infrastructure and irregular building problems have been aroused.
- This situation has effected the urban structure negatively.
- As a result, there is a need to transform these areas to a contemporary structure.



4 / 10

### How slums could be integrated with urban areas?

- Slum areas were in developing areas of the city at first. But today, these areas are in city centers.
- So, there is a need for;
  - ✓ taking down of these unqualified structures and building of new ones.
  - ✓ new solutions to improve irregular buildings and insufficient infrastructures.
  - ✓ providing urban settlement areas and meeting of dwelling demands in the concept of development right.
- Therefore, firstly, sufficient and qualified buildings should be provided for formalized slum residents and construction method should be developed.
- In this paper, respect to this context, a theoretical proposal is offered to transform the slum areas to contemporary settlement areas.



5 / 10

### How slums could be integrated with urban areas?

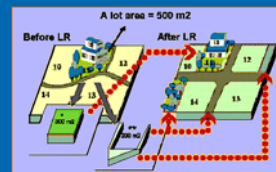
- The followings are basic assumptions of this proposal:
  - ✓ The transformation of the slums to modern and quakeproof buildings should be provided.
  - ✓ Instead of leaving construction rights to slum owners completely, this rights should be shared with public authorities.
  - ✓ Building contractors, called as land developer, should be included in this mechanism. Therefore, the fund needed for transformation of the slums into contemporary buildings can be provided.
  - ✓ It is proposed that this method is implemented regarding building block based rather than parcel based. It should be based on an urban transformation law.



6 / 10

### How slums could be integrated with urban areas?

- The slum region chosen for proposed method should provide urban growth and renovation period of this region.
- So, the nearest areas to the city center should be primary areas to be renewed.
- Firstly, development plan for renovation area should be prepared.
- After that, it should be perform a 'Land Readjustment' implementation, on the slum area plots in the boundaries of urban transformation plan.
- Thus, land deduction process reaching 40% on the plots in the area is performed to provide free areas for roads, green areas, recreation areas, children's parks, car parks, police stations, temple and school areas.



7 / 10

### How slums could be integrated with urban areas?

- Then, plots should be divided into shares in respect to building blocks.
- After that, municipality should have a building contractor who produce buildings according to the rule of giving flats to owners in every building block.
- Provided that constructed buildings are not larger than 100-120 m<sup>2</sup>, only one independent flat should be given to the each slum resident.
- 60% of the constructed buildings should be given to contractor and the other part should be given to public administration.
- Public authority should allocate some part of this flats to the other slum owners who dwelled in the other slum regions unsuitable for residence.
- In addition, the other parts should be sold to the low income people with convenient credit system.

8 / 10

### Benefits of the method

- Followings are some of the benefits of this method:
  - ✓ There will be no need for expropriation by local authorities.
  - ✓ As a result of planning and land readjustment, each slum owner will have more standardized and quakeproof buildings.
  - ✓ Renovation of the non-quakeproof building stock will be provided.
  - ✓ With transforming of the slums to modern buildings, these areas will have an aesthetic view.
  - ✓ The issues like un-planned land use and transforming of agricultural lands to urban lands will be solved.
  - ✓ Slum-based environmental issues will be improved.
  - ✓ This process will support slum owners to be integrated with city life.



9 / 10

### Conclusion

- One of the most important problems in developing countries is the integration of the slum areas with city centers and formalizing of the property rights.
- In this paper, a new model was introduced. Respect to this method, slums will be evacuated and only one flat will be given to the each slum owner in this new settlement area.
- This method will not introduce a new financial charge to local authorities and also will provide opportunity for low-income society units to have dwellings with low-cost in these areas.
- This method is advised to apply to the countries having slum issues.



10 / 10



thanks for your attention

Melihat CETE  
Karadeniz Technical University  
Department of Geodesy and  
Photogrammetry, Trabzon-TURKEY  
Tel: +90 (462) 3772704  
Fax: +90 (462) 3280814  
e-mail: mchet@ktu.edu.tr