A study on the New Directions of Squatter Redevelopment in Korea

Kyu Sung Lee
Department of Architecture
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(Abstract)

There are two kinds of urban redevelopment in squatter areas of major cities. Conventionally-used "Eradication" implies the clearence of slums and the introduction of high-rise buildings. Recently "Upgrading" is considered positively, which implies the gradual development of squatter areas using public loan and securing the tenure of occupants.

To make "Upgrading" possible several obstacles should be removed in the present national settings. Besides in evaluating alternative projects "Profitability Analysis" was widely used. But in future evaluations "Social Cost Benefit Analysis" should be considered a useful tool.

韓國의 不良住居地域 再開發에 있어서의 새로운 方向 研究

李 奎 成 건 축 학 과 (1981.4.10 접수)

(요 약)

大都市의 不良住居地域을 개발하는 방법에는 크게 두가지를 들 수 있다. 보통 잘 採用되는 手法은 不良住宅을 撤去하고 高層빌딩을 建立하는 "撤去"에 의한 方法이며 또 하나는 최근에 와서 論議되는 것으로 公共資金을 投資하여 現地住民의 外部移轉없이 점차적으로 開發해 나가는 "改良"에 의한 方法이다.

이러한 "改良"에 의한 개발을 가능하게 하려면 현재의 制度가 가지고 있는 여러 障碍物들이 除去되어야 할것이다.

또한 事業性을 評價하는데 있어서도 지금까지는 事業主體의 利益만을 고려하는 "受益性 分析法"에 의존하는 수가 많았으나 앞으로는 國家의 發展目標를 고려할 수 있는 "社會費用利益分析法"을 利用하는 것이바람직 하다.

I. Introduction

This paper is prepared to study the possibility of upgrading squatters and slum areas in major Korean cities. Housing policies should be formulated with a mind to their social effects as well as their contribution to economic development. Squatters or slum areas should not be eradicated to make way to public works projects without provision first being made for relocating their occupants adequately. Moreover public housing which serves to stratify communities by income group or class should not be built.

To set any development plan which is intending to revtialize a squatter settlement financial resource is a first consideration. According to the scarcity of capital urban redevelopment for low income people has been a new experiment for Korea. When a municipality had a chance to mobilize a certain amount of capital resource to invest into a declining area it tended to be hasty enough to eradicate a slum together with faulty relocation planning, lacking in considering another alternative, that is an upgrading project.

To curb evergrowing housing shortage in urban areas and to utilize potential resources of squatter residents, upgrading should be considered a positive urban redevelopment. Squatter upgrading means a gradual improvement of slum houses and infrastructures in a squatter without drastic change in occupancy.

In implementing a gradual upgrading of a blighted area several obstacles are found in the Korean national settings. Squatted land and illegal buildings have no access to be improved or remodelled according to present laws and regulations. Relatively high standards of the National Building Code could not permit rebuilding or improvement in a small lot. Decision-makers are suspicious about the economic benefits of an upgrading project because they seek to maximize the nominal profitability of investment. And unreal city plannings together with the centralized planning machine could hurt and absorve the whole efforts of upgrading. Above obstacles should be tackled with new concepts and methons which will more or less make rewrite National Housing Policy Guidelines.

I. Present obstacles and remedial measures for squatter upgrading

1. Laws and Regulations

In the big cities of Korea there are many squatter settlements formed during '50s after

Korean war. Migrants are added gradually after first sudden settlement. While many squatters were legalized and public lands were sold at a long term reimbursement basis, other areas are not legalized because of their inferior environment. If someone wants to remodel or improve his house he should get permission from the municipality. In case his house was not legally built he could not be allowed to do so. Either that house has no market value when he wants to mortgage it to the bank to get a loan for improving his house. This insecurity of tenure discouraged people from improving their houses and surrounding environment. Besides illegal conditions of land and buildings it is found that present standards for building makes it impossible to build a new house or improve an existing house on the same plot. According to present standard imposed by National Building Code a plot size for house should be more than 90 square meters and Building Area Ratio should not exceed 60%. And by Public Housing Promotion Law which governs most housing construction using public loans preparation of sophisticated and spacious roads is needed. Standards for middle and upper income housing are indiscrimanately imposed on low income housing as Turner worried.

"The imposition of modern minimum standards on popular urban housing in a transitional economy is an assault on the traditional function of housing as a source of social and economic security and mobility. (1)

Higher standards imposition comes from the uniformity of present laws which rules indiscriminately.

Considering the revision of present standards to make upgrading possible, the revision should state the opportunity to assemble and improve dwelling units and environment as an evolutionary basis which will lead to the easement of present standards.

⁽¹⁾ John F.C. Turner, Barriers and Channels, The Journal of the American Institute of Planners (Vol. 33, No. 3, 1967) p. 3.

To induce practical improvement of a squatter legalization can be thought as a positive measure. (2) Though security of tenure does not necessarily mean improvement, it will encourage the residents much to do something for their environment. There were many cases of such inprovement. When squatters were legalized, they were easily and gradually amalgamated into the outer community leaving their marginality. (3)

For legalization a selection criteria of differentiating squatters should be established in the context of social, economic and physical aspects. It will need a macro approach to squatters all thorugh the Nation. A proper institution should be considered to conduct this data collection and eventual legalization.

2. City planning and decision making process

Naturally a municipality tends to suggest, an upgrading project should fall into the category of the existing city plan, which means more demolition of slum houses and construction of broad straight roads. In many cases, to upgrade an area, road system should be planned again.

It will give much trouble to the planning section of the municipality. Because the existing plan has been made through great efforts to follow very difficult and time-consuming process owing to the centralized planning machine in the Nation. To revise part of a city plan for meeting the diverse factors of an upgrading project, it will take a long time. Self autonomy and decentralization of decision seems more effective in this situation as Turner put it.

"If housing, and all other personal and specific services, must be autonomous, this too much centralized system is a hig obstacle in solving housing problem." (4)

3. Appraisal of project feasibility

The equitable distribution of income among individuals and households is central to a nation's welfare and has become a major public concern in both developed and developing countries throughout the world. Egalitarian philosophies stimulated by the industrial revolution of western Europe have produced widespread expectations that economic growth will equalize wealth and earnings opportunities as well as raise the average level of economic welfare. But these expectations have not been borne out. (6)

This conflict between efficiency and equity should be treated with further social legislation and social development. Considering squatter redevelopment as a dynamic force for equalization various social and economic aspects implicitly included in Squatter Settlements should be revealed.

Conventionally a project feasibility is judged by profitability analysis which considers only the benefits accruing to the direct investment. For an appraisal of a project aiming at squatter upgrading, Social Cost Benefit Analysis will provide a broad support for economic benefits and social benefits generated by an upgrading project.

While we are interpreting many external effects coming from upgrading into economic values we will find some hard cores which can not be compatible with monetary values. They are called social values and equally or more valuable than external and internal economic

⁽²⁾ Recently Government announced the legalization of part of slum houses. (Han kook Ilbo May 15, 1981) But squatters as public works projects are not to be legalized.

⁽³⁾ Squatters are sometimes called "Marginals" because they appear to be outside the prevailing ecomic and political system.

⁽⁴⁾ John F.C. Turner, Housing by people, Maryon Boyard, London (1976) p. 17.

⁽⁵⁾ Irma Adelman and Cynthia T. Morris, Economic growth and social equity in developing countries, Stanford University press, stanford (1973) p. 14.

values.

II. Economic and social spects of squatter upgrading

There seems to be a big gap between the national development plan and the programming at the project level. The national plan is usually formulated in terms of objectives involving such considerations as the standard of living, the average rate of growth, the level of employment, balance of payments position, self-reliance, and destribution of income. In other words the national plan is formulated in the broad categories of overall national objectives. Though individual projects are developed without the broad framework of the plan, they are typically formulated and evaluated primarily in terms of commercial returns on investment, and this process does not take into account the full range of national objectives. A better alternative is the use of the so-called Social Cost Benefit Analysis which is essentially a tool to formulate and evaluate projects in the explicit national objectives underlying development planning for the nation as a whole.

The objective of profitability analysis is to maximize the nominal profitability of investment while that of the Social Cost Benefit Analysis is to maximize national economic profitability as represented by the approximately weighted sum of the net benefits according to different national objectives embodied in the plan. While commercial profitability is calculated on the basis of market prices of inputs and outputs, national economic profitability is calculated on the basis of shadow prices of inputs and outputs reflecting their social scarcity and value in the context of the targets of the plan.

One consequence of the above is that while commercial profitability analysis ignores the so-called external effects working outside the market mechanism, the Cost Benefit Analysis takes them into account explicitly. Further costs and benefits may be produced to their present value by the use of a given market rate of mterest under the commercial profitability analysis, while the present values of future benefits and costs under national economic profitability analysis are calculated by the use of the social rates of discount, reflecting the community's preference between present consumption and future consumption. The determination of national objectives and the relative weights to be attached to them reflect fundamentally the value judgements of the society. These are the functions of the policy makers in a Cost Benefit Analysis. However, under the present arrangements these functions are too often performed uoconciously by project technnicians.

A planner or an architect should evaluate alternative plans according to the objectives of National Develodment when he is dealing with a squatter project. He should not apply only profitability analysis which ignores external effects working outside the market.

A renewal project by eradication could bring high rate of profit. But the opportunity costs represented by cheap credit (or loan), favoured access to building materials, tax preference, and the other subsidies given private investors are added to conventional costs which is already very high.

To set the evaluation examine National objectives put in the Fourth Five Year Economic Development Plan. (1977—1981)⁽⁶⁾

Main three objectives are as follow:

- 1. Economic structure for self-sustaining growth.
 - 2. Promotion of social development.
 - 3. Technological innovation and improve-

⁽⁶⁾ Government of the Republic of Korea, The Fourth Frve Year Economic Development Plan, Seoul (1976) p. 10.

ments in efficiency.

First objective is aiming at producing as much GNP as possible, second at a qualitative improvement brought about by increased equity in income distribution and the third is aiming at reducing development costs through innovations.

With these objectives evaluation of upgrading projects could be started. Especially production

and equity is concerned.

Within the national setting the critical lack of capital for housing is a problem that will remain longer. There have been some studies in Korea about the effect of investment in housing on national economic development. (7)

The influence of improved housing on productivity has been appraised positively by innovative studies mainly in the United States. (8)

Table M-1: Costs and Benefits of Upgrading

The state of the s		
	Costs	Benefits
Macro-economic	A. Resources invested for infrastructure improvement B. Opportunity cost of self-help labor C. Investment by peole for their houses D. Cost of rehousing for the removed fomilies	A. Increased national or area income 1. Higher wages and salaries through increased availability for work and higher motivation 2. Higher prodeut 3. Higher returns on investment (rent) B. Reduced public cost 1. Reduction in hazards such as crime and fire 2. Reduction in hospital and medical care from injuries and disease C. Increased land value (tax)
Micro-economic	A. Capital investment (loan)	A. Returns on investment by reimbursement
Social	A. Negative effects on rehoused families	 A. Positive change in income distribution B. Improved family stability C. Improved physical health and nutrition D. Improved mental attitude and aspirations E. Better work and study attitude F. Higher morale G. Experience of participation H. Increased social equity

⁽⁷⁾ Chong Won Chu, Korean Housing Needs and Resources, Korea Planners Association Journal, Seoul (Vol. 9 No. 2 Oct. 1974)

⁽⁸⁾ Seel ① Leo H. Klassen and Leland S. Burns, The position of housing in national economic and social policy, Article for Capital Formation in Latin America, Pan American Union, Washington D.C. (1973) ② B. Khing Tjiae and Leland S. Burns, Casualty and measurement, Panel discussion about Housing and Productivity, American Statistical Association. (1966)

⁽⁹⁾ United Nations, Housing policy guidelines for developing countries, U.N., New York (1976) p. 20.

But unfortunately we could not calculate the marginal returns of housing investment to total GNP. This makes it difficult to allocate investment to housing properly. United Nations recommended 5% gradually increasing to 12% of total GNP to be invested to housing. (9)

Within the given amount of investible resources we are evaluating many alternative projects. To choose between upgrading and eradiction the evaluating tool will be Cost Benefit Analysis and the objectives be the largest economic benefits and the optional social equity.

An upgrading project may or may not compete with a traditional urban renewal. (eradication) Using Social Cost Benefit Analysis considering National Economic Development as a whole it may compete in many projects. From a planner's view point costs and benefits of an upgrading project are shown in Table III-1.

Here direct or micro-economic benefits accrue directly to the initial capital. Indirect benefits, termed macro-economic, spread throughout the general economy and are revealed in national income accounts. The third type the most difficult to evaluate in terms of economics, are social benefits. Marginal benefits springing from an upgrading project cannot be calculated in nummerical sum. And it is impossible to calculate total benefits. But the level of calculation can be raised if we try to interprete external effects of upgrading. When we focus on the fact that social costs of upgrading are negligible we could find much room for the adequacy of upgrading projects.

On the contrary an eradication and rehousing project can cause too much costs as shown in Table II-2.

Table II-2: Costs of Eradication

- I. Macro-economic costs
 - A. Decreased nation or area income
 - 1. Losing jobs and working place
 - 2. Lesser product
 - 3. Increased travel expenses and time
 - B. Increased public costs
 - 1. Resources invested to infrastructure of new sites
 - C. Decreased housing stock
- II. Micro-economic costs(restorable)
 - A. Capital investment (public loan)
 - B. Capital equity invested by private developers
- III. Social costs
 - A. Decreased family stability
 - B. Destruction of social networks
 - C. Destruction of neighborliness
 - D. Decreased job opportunity
 - E. Widened gap between classes

Examining the costs of eradication much difference lies between the social costs of eradication and those of upgrading. Those of eradication are serious.

And in macro-economic costs increased travel

expense and time and decreased housing stock deserve consideration.

In case of an urban renewal project (Favela) in Brazil people would have to travel two hours each way and spend one third of the

minimum salary on fares. (10) This case shows how a faulty relocation could affect low income people.

An eradication project will affect seriously present housing situation, It will raise the rent of low income houses significantly.

V. Conclusion

Social Cost Benefit Analysis is introduced as a useful tool in evaluating alternative urban redevelopment projects.

Conventional way of urban redevelopment through cradication can not secure the favoured results in achieving national objectives, that is balanced development of national product and equitable income redistribution.

Therefore squatter upgrading could be considered positively. It can compete easily with conventional development when approached with the Social Cost Benefit Analysis in evaluating projects.

Reference

- John F.C. Turner, Barriers and Channels, The Journal of the American Institute of Planners, Vol. 33 No. 3 (1967)
- 2. ——, Housing by people, Maryon Boyard, London (1976)

- Irma Adelman and Cynthia Taft Morris, Economic growth and social equity in deveoping countries, Stanford university press, Stanford (1973)
- Government of the Republic of Korca, The Fourth Five Year Economic Development Plan, Scoul (1976)
- Leo H. Klassen and Leland S. Burns, The Position of housing in national economic and social policy, Capital Formation in Latin America, Pan American Union, Washington D.C. (1973)
- American Statistical Association, Panel discussion about housing and productivity, the 1966 Social Stastistics Section.
- United Nations, Housing policy guidelines for developing countries, U.N. New York (1976)
- 8. J.E. Perlman, Favela Removal; The myth of marginality, University of California Press, Berkeley (1976)
- 9. Michael P. Todaro, Economics for a developing world, Longman, London (1977)
- E. J. Mishan, Elements of cost-benefit analysis, George Allen and Unwin Ltd, London (1976)
- 11. Chong Won Chu, Korean housing needs and resources, Korea Planners Association Journal Vol. 9 No. 2 (Oct. 1974)

⁽¹⁰⁾ J.E. Perlman, Favela removal, The myth of marginality, University of California Press, Berkeley (1976) p. 213