Introduction: The Process of Urbanization and Market Value of Land

Land is a vital component in the economic process and it is an important social asset. Its ownership pattern and its use largely determine the structure of the economy and shape the social processes. In the development process, rural land is converted into urban land commanding far greater market value than that is commanded by the rural land. The obvious reason is that with urbanization, the non-agricultural uses of land increase enhancing its productivity. The demand of land for industrial, commercial and residential purposes increases and so does its market value. Thus, the economic theory dictates that urbanization process would normally bring relatively sharp increases in the market value of rural land which is ready for conversion into urban land.

Who is entitled to such an increase in market value of the rural land -- the individual who owns the land or the society at large which is collectively causing the process of urbanization to take place -- is one important question that should concern the urban planners and economists. Secondly, at the fringe, the sudden change in the market value of rural land may lead to a haphazard growth of non-agricultural activities such as industry, commerce and housing. How may this process be systematized and planned to avoid the social and economic costs that are incurred on the in-built inefficiency arising out of such unplanned development?

Importance of Studying the Land Acquisition Process

The study of the land acquisition process assumes importance since it takes away land from the rural people and converts it into urban land. Not only the land use changes but the occupational structure also gets affected bringing changes in the economic and social variables.

Further, this process is not so simple and static. It has its own dynamics which affect the overall development of the area. The dynamics are determined by the variables of time and space,
land use and the market value paid to the owners of land in exchange of their acquired land. The analysis of such variables is essential for examining the economic rationality and social justice contained in a process such as land acquisition which is likely to affect a large section of population. It is with this point of view that the study of spatial and temporal patterns of land acquisition and of the market value assessed and paid for the acquired land becomes important.

**Process of Urbanization in Delhi**

Historically Delhi has been performing the urban functions by being the capital city of many rulers. The increase in urban population and area under non-agricultural uses is given below:

**TABLE 1.1: Urban Population of Delhi**

<table>
<thead>
<tr>
<th>Year (in lakhs)</th>
<th>Total Population</th>
<th>Urban Population</th>
<th>% of Urban to total population</th>
</tr>
</thead>
<tbody>
<tr>
<td>1901</td>
<td>4.06</td>
<td>2.01</td>
<td>51.4%</td>
</tr>
<tr>
<td>1911</td>
<td>4.14</td>
<td>2.33</td>
<td>56.3%</td>
</tr>
<tr>
<td>1921</td>
<td>4.88</td>
<td>3.04</td>
<td>62.3%</td>
</tr>
<tr>
<td>1931</td>
<td>6.36</td>
<td>4.47</td>
<td>70.3%</td>
</tr>
<tr>
<td>1941</td>
<td>9.18</td>
<td>6.96</td>
<td>75.8%</td>
</tr>
<tr>
<td>1951</td>
<td>17.44</td>
<td>14.37</td>
<td>82.4%</td>
</tr>
<tr>
<td>1961</td>
<td>26.59</td>
<td>23.59</td>
<td>88.7%</td>
</tr>
<tr>
<td>1971</td>
<td>40.65</td>
<td>36.47</td>
<td>89.7%</td>
</tr>
<tr>
<td>1981</td>
<td>62.20</td>
<td>57.68</td>
<td>92.7%</td>
</tr>
</tbody>
</table>
TABLE 1.2: Area Under Non-Agricultural use in Delhi

<table>
<thead>
<tr>
<th>Total Area (in lakhs)</th>
<th>Area not available for cultivation</th>
<th>(2) as % of (1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1960-61</td>
<td>3,65,589</td>
<td>85,240</td>
</tr>
<tr>
<td>1970-71</td>
<td>3,64,749</td>
<td>1,16,913</td>
</tr>
<tr>
<td>1980-81</td>
<td>3,64,442</td>
<td>1,28,682</td>
</tr>
<tr>
<td>1986-87</td>
<td>3,64,442</td>
<td>1,68,134</td>
</tr>
<tr>
<td>1960-61</td>
<td>3,64,442</td>
<td>1,74,918</td>
</tr>
</tbody>
</table>
The above graphs and tables show that in Delhi the increase in urban population has been from 82.4% in 1951 to 92.7% in 1981 and the area not available for cultivation which may be taken as a broad indicator of land under urban uses has increased from 23.3% in 1951 to 48% in 1988-89. Both the variables reflect the extent and rapidity of the process of urbanization in Delhi from 1951 onwards.

Land Acquisition in Delhi

As far as the area is concerned, in about 30 years from 1959-60 to 1988-89, the land under urban uses increased from about 23% to 48%. This additional 25% land under non-agricultural uses was primarily achieved through the land acquisition process in Delhi. From 1960 to 1989, around 89,678 acres of land was acquired by the State in Delhi for its development as urban land out of which 70,000 acres (78%) of land was acquired for Delhi Development Authority (DDA) and 19,583 (22%) acres of land was acquired for Government agencies for non-plan purposes. In total, from 1948 to 1989 an area of 93,243 acres was acquired with 70,094 (75%) acres under Plan schemes and 23139 (25%) acres under non-plan schemes. The total compensation assessed for 93,243 acres of land up to 1989 was about Rs. 338 crores in addition to about Rs.100 crores as enhancement that had already taken place in compensation bringing the total to Rs.437 crores. The
enhancement is likely to increase since the cases relating to area already acquired are still pending in the Courts. The real compensation for the land acquired may finally come out to be around Rs.500 crores.

The above facts reveal that after Independence, especially from 1960 onwards, the State has played a very dominant role in carving the landscape of Delhi and converting the rural landscape into an urban landscape. It took over centuries for Delhi to have 23% of its land converted into urban land whereas in merely three decades from 1960 to 1989 it converted more than 25% of its land into urban land through the intervention of the State.

Under what process such a large area of 93,234 acres of land was acquired by the State in Delhi is important to understand since the parameters and variable of this process such as area, its location, market value and compensation of land acquired, the process of determining market value of such land, the administrative process and the time taken in acquisition, are the factors whose dynamics have gone into the making of the metropolis of Delhi as it is today. In other words, the interplay of these factors have their own unique role in determining the urban structure of present day Delhi.

Adoption of Delhi-Model by Other States

Unlike the metropolitan cities of Bombay, Calcutta and Madras where the conversion of rural land into urban land has been largely through the free market forces, Delhi opted for a different model where State intervened to regulate the market forces either through administrative law or through its institution of Delhi Development Authority (DDA). The State became first the largest buyer of land and then its supplier.

Following the example of Delhi, other States of Union of India have also established Development Authorities like Lucknow Development Authority, Ghaziabad Development Authority, Agra Development Authority etc. for the planned development of their cities. It becomes, thus, important to make a scientific study of such a large scale land acquisition process in Delhi for the further development of Delhi and for the development of other cities of India as well.
Objectives of the Present Study

The purpose of the present study is, therefore, to investigate this large scale process of land acquisition in Delhi, broadly from 1948 but especially from 1959 when the idea of planned development mooted by urban and town planners started getting implemented, to the year 1989, by which year, the major proportion of land planned to be developed under "Master Plan of Delhi" had been acquired.

Further, the dissertation sets on to analyse this process spatially and temporally with a view to understanding its economic and social implications and in order to make land acquisition a more effective instrument of planned urbanization and development of Delhi. Such an analysis would also be useful for the formulation of the policy for future urban areas and for planning urban processes in India.

Keeping in view the dynamics of urban change outlined above, the major objectives of the present study are as follows:

* To compile, process and present the basic data relating to land acquisition in Delhi from 1947-48 to 1988-89 in a systematic and scientific way in order to help promote research on theoretical issues emerging out of such a large scale land acquisition process undertaken for the planned development.

* To help develop such models of planned urbanization in India which are economically efficient and socially equitable. The models should be such as recognize the State's predominant role in the planning and development of urban areas and are based on a clear understanding of the interplay of economic and social forces that are present at the time of initiating the development process.

* To analyse the land acquisition process temporally and spatially to help understand the urban land development - planned or unplanned - that has taken place in Delhi from the year 1947-48 to 1988-89.
To examine critically the economic rationale of the land acquisition process with a view to making it a more effective and efficient tool for the planned development of Delhi.

To examine the economic and social implications of land acquisition process in Delhi from 1947-48 to 1988-89.

To make policy recommendations based on the results of the study.

To identify certain theoretical and practical issues for further research in the field of urbanization involving large scale land acquisition by the State. [Refer Flow Chart 1.1]

Data Base

This is primarily an empirical research. The data of the present study relate to the Awards of acquisition drawn by the Land Acquisition Collectors in Delhi and the judgments of the Courts of Additional District Judges and the High Court of Delhi. For the purposes of the study, data of 3277 land acquisition Awards drawn from 1947-48(1948) to 1988-89(1989) were collected from the original Land Acquisition Registers and original Awards by the Land Acquisition Collectors from the Office of the Deputy Commissioner, Delhi. The study covers each and every permanent award drawn during the period of analysis (1948-89).

The copies of 150 judgments made by the Courts of ADJs and the High Court were similarly collected from the various offices of LACs in the Office of the D.C, Delhi. The data relating to enhancement were collected from the Land Acquisition Branch, D.C Office, Delhi and the Land & Building Department, Delhi Administration from their original records. The data pertaining to awards/judgments were collected in respect of award number, village, LAC circle, notification no. under section 4 and its date, notification no. under section 6 and its date, area of award, nature of the scheme, nature and purpose of acquisition, market value assessed, solatium, interest Under Section 4(3), 28 and 34, additional amount under section 23(1-A), compensation for structures, crops, etc.

In case of Court judgments, date of possession and amount of remittance and its date were similarly collected. The data relating to the above mentioned variables of awards / judgements
were compiled in a systematic way with reference to time (years and periods) and space (village and regions) to generate various analytical series. For example, the data relating to land acquired in Awards were compiled to calculate the land year-wise and village-wise.

Similarly, other variables were also compiled with reference to years and villages. These data were further compiled periodically and region-wise. The various time-series and regional-series were processed to generate statistical averages, standard deviations and compound growth rates.

The data relating to rates determined by Land & Development Office were collected from the Land & Development Office, Ministry of Urban Development (GOI) itself. These rates were originally available zone-wise and they were compiled with reference to years and LAC circle-wise for making comparative analysis.

The data relating to encroachment of land, etc. were collected from the Land Section of the DDA. The census of India (Delhi) and Delhi Statistical hand book of Delhi Administration were also consulted. The data relating to urban non-manual price cost Index were taken from the various statistical abstracts published by the Central Statistical Organization.

The main source of data for the present study has been the Land Acquisition records of the Office of Deputy Commissioner, Delhi.

Methodology

The methodology of the study has been to compile the data collected from the original records systematically with reference to various periods of 1948-89, 1948-58, 1959-89, 1959-69, 1970-79, 1980-89, 1980-84, 1985-89 for making temporal analysis. For making spatial analysis, the data were compiled village-wise and Delhi was divided into seven regions viz. Delhi City and adjoining area (DL), Shahdara (DS), Mehrauli East (ME), Mehrauli West (MW), Narela (N), Palam North (PN) and Palam South (PS). Geographically DL, constituted broadly Central Delhi, DS East Delhi, ME & MW South Delhi, Narela North Delhi and PN & PS West Delhi. [MAP 1.1]
Further the data were also compiled according to the purpose of land for which it was acquired viz., Plan or Non-Plan purpose. Plan or Non-Plan data were similarly analysed temporally and spatially.

For purposes of analysis, ratios, percentages, simple and weighted arithmetic averages, standard deviations, correlation coefficients and compound growth rates were calculated in respect of a number of variables related to land viz., land acquired, compensation assessed, time taken, interest, rates of market value and rates of compensation. These dimensions were explored using time series data for Delhi as a whole as well as for its regional components.

Regression analysis was used, in the first place, to calculate compound growth rates and for fitting statistical trends for the period 1948-89 as a whole and for its sub-periods. Graphic analysis was also used to comprehend the behaviour and trends in various variables.

At a later stage, multiple regression analysis was used to examine spatial behaviour of market value in Delhi. Dummy variables were used to identify spatial as well as temporal differentiation. Besides, the t-values were calculated to find out the statistical significance of various parameters.

Thus, in brief, all the above analytical tools were applied to study the patterns, variations and trends in the components of land acquisition process, temporally and spatially.
FIGURE 1.1: PLANNED DEVELOPMENT OF URBAN LAND IN DELHI AND LAND ACQUISITION PROCESS

FOR STATE

1. Determination of Area.
2. Determination of MV Rate.
3. Total Compensation.

FOR LAND OWNERS

1. Determination of Area.
2. Determination of MV Rate.
3. Total Compensation.