Summary and Conclusions
In the concluding section, researchers often lament data limitation in their empirical analysis. They argue that their observations or generalisations would have been stronger if some additional and more reliable data could be obtained. Any research on urban land or housing is so notoriously deprived of data-base that by the end of the research work the researcher perhaps learns to live with it rather than entertaining in conventional rhetorics. Nonetheless, it may be worthwhile to recommend in the beginning of this discussion that the public agencies dealing with urban land and housing should maintain proper records of transactions in land and housing. Secondly there is an attitude within the government circles that policies pertaining to land/housing distribution and method of determination of land/housing prices should be kept confidential. Earlier researches on Delhi's land or housing for example by Asish Bose or Marie Howland have accumulated considerable amount of data-base but they have also observed lack of proper maintenance of records. The surmise of this research experience is that transparency in the working module of the Delhi Administration/Delhi Development Authority will definitely help to remove many doubts that linger on the mind of the public, press and parliamentarians. Concealing informations in view of a large number of court cases in progress against the DDA will only lead to further confusion followed by many more litigations.
In the present study an attempt has been made to critically analyse the working of the Delhi Development Authority emphasising on the entire gamut of land management viz. supply of land in the land market, land use regulation, protection of land, distribution of land and pricing of land. Enlisted below are the major findings of this research.

The second chapter deals with the legal framework adopted by DDA to execute the 'Scheme of Large Scale Acquisition, Development and Disposal'. The basic purpose of bulk acquisition of land with the help of the Land Acquisition Act of 1984 had been to increase the supply of land in the land market. Available data reveals that the process of land acquisition has been extremely tardy. Though notification of land was done with undue haste (60,000 acres of land earmarked for development was notified by 1965), the Delhi Administration has been able to hand over an aggregate of 59,000 acres (approximately) of land to the Delhi Development Authority only as late as 1994. Again the amount of land made available to the DDA by the Delhi Administration has been supplied unevenly over time. This is manifested by a very high coefficient of variation of annual land supply over time. Delhi Administration sources indicated that technical difficulties in acquiring land earmarked for development were due to (a) incompleteness of the master plan and lack of adequate specification pertaining to Khasra no./Plot no. etc. which was to be referred to while notifying land and (b) non-availability of enough fund to execute the bulk acquisition policy.
However the most important reason behind delay in the land acquisition procedure has been the large number of appeals in the court against the compensation amount paid by the Administration. Grievances against compensation remains unabated even after various amendments of the act whereby different components which adds up to the market value viz. solatium etc. has been increased. Our analysis of the land acquisition procedure based on informations obtained from various department of the Delhi Administration revealed that the basic fallacy lies with the determination of market value of land earmarked for acquisition. It has been deciphered that the Delhi Administration has an unofficial policy of underestimating market value of land in the court of the Land Acquisition Collector (LAC) where executive proceedings takes place. Here the aggrieved persons do not produce the full evidences in support of their claim apprehending their rejection. However, after the orders are issued from the court of the LAC, they appeal for enhancement to the higher courts with sufficient evidences in support of their claim where judicial proceedings takes place. Documents available from the Delhi Administration reveals that in almost 100 percent cases of appeal for enhancement (of compensation) the petitions were upheld. The bureaucratic and judicial delays in clearing off the cases, leads to accruing of huge sum of interest payment along with the enhanced amount of compensation.
A study of the documents of the Delhi Administration and an analysis of the land acquisition procedure has been made to understand the aspects of application of the Land Acquisition Act in the case of 'Delhi Model'. It can be inferred that though the act has been strengthened through a number of amendments to expedite the process of acquisition, the major obstacle remains in the determination of "fair market value" of land. Thus appealing against the award announced by the LAC has become a regular practice. It may also be stated that the guidelines for determining land value are quite nebulous. Consequently the Administration has to exercise its discretion to evolve a pricing method which would be generally acceptable and discourage the practice of appealing against the award.

Apart from this, there are other loopholes in the Land Acquisition procedure which can be labeled as administrative drawbacks. It was observed that non-issuance of certain sections [eg. 12(1)] of the act, in the process of acquiring the land, release of compensation money without bank guarantee etc. led to avoidable expenditure which ran into crores. It would therefore be important to make the administration efficient and accountable for the job they perform without which no amount of procedural reform will be fruitful.

In the third chapter the Delhi Master Plan and regulations related to land management policies have been studied. An analysis of the policy measures
pertaining to land management revealed that DDA perceives violation of land-use norms in two ways.

Firstly use of plots/premises in contravention to the specified land-use regulations is termed as mis-use of urban land-use. For this category of violation of land-use regulation the public authority levies penalty in terms of fines. Delhi Development Authority records reveal that substantial amount of revenues has not been realised despite large scale violation of this type. Again rules pertaining to punishment to be levied on such cases are very complicated. In the Delhi Administration Act of 1957 it was stated that existing cases of mis-use of land-use specifications were to be dealt as per a set Zoning Regulation that was to be formulated. This Zoning Regulation was finally formulated in 1986, and was equipped to tackle the cases that started before 1962 only. Since 1962 other cases of contravention of land-use regulations have taken place which were dealt as per the 'Special Appeal for temporary continuance of mis-use'. However they could not be suitably brought under the jurisdiction of the Zoning Regulation of 1986. Thus the difference in the case of violation (in two different periods) led to the question of differential treatment and prejudice. As a result of this confusion, the MPD 2001 has made provisions for converting the land-use (in all cases of mis-use of premises) on payment of a conversion fee.
The second type of land-use violation is squatting on public land to form junggi/jhompri is termed as unauthorized occupation of land, and is dealt according to the principles of "Protection of land from unauthorised occupation". DDA maintains a land protection squad which along with the Delhi police carries out eviction and demolition of unauthorized settlement and slums. The Delhi Administration Act has legal provision for such actions as per section 29,30,231 alongwith Section 14 of the act. Though there are frequent political interference to stall eviction proceedings, available data reveals impressive performance of the DDA in this front. As a result growth of slum population or incidence of fresh unauthorized occupation of land has been quite low.

It can be concluded that the legal procedures to deal with cases of unauthorized settlements/slums etc. are much more stringent than provisions available to deal with misuse of premises etc. Thus it can be inferred that there is a bias against the poor while tackling cases of violation of land-use norms.

It may be noted that while there has been a decrease in the growth rate of population in Delhi the peripheral census towns and urban villages have recorded phenomenal growth. Thus the economically weaker section among the new entrants in Delhi Urban Area have been confined to the periphery by a
stringent land management policy which discourages growth of informal settlements within the city. Thus subsidy within the better served Delhi urban area is being progressively cornered by the rich resulting in growing segmentation between the rich and the poor.

In the fourth chapter the policy of distribution of land to different land use categories has been analysed. Here it has been observed that the procedure of supply of auction plots or SFS flats to the higher income groups ensures quick possession of plots and flats. However, despite the direct and indirect subsidies earmarked for the LIG and EWS plots/flats procedural guidelines makes room for excessive delays. For instance, construction of LIG and EWS flats is very time consuming. This results in significant price escalation - much beyond the affordability of the poor. In the process the indirect subsidy provided in the form of installment payment of the cost of flats gets eroded. This also leads to non-payment of installments resulting in cancellation of allotments.

Again in case of Rohini it has been recorded that size of plots disbursed to the poor at a subsidized price were beyond their requirement. This led to en-masse transfer of ownership of land. Thus the policy of distribution of shelter and land has benefited the rich much more than the poor.
It was further observed that DDA's policy to shift from co-operative plotted development to co-operative group housing in order to increase supply of shelter served the rich almost exclusively. The poor having lesser access to institutional finance and being incapable to organise societies were left out of the co-operative movement which was by and large successful in Delhi.

DDA's dismal performance in disbursing commercial land and shops at a remunerative price could be traced back to its laxed enforcement of land-use regulations. Since there is not much control on the functioning of commercial activities in residential areas. It was possible for anyone to carry on commercial activities in residential premises in contravention to land-use norms, without paying the required penalty fee. As a result DDA's formal built-up commercial shops had no takers. It obviously appeared as if DDA supplied commercial land/shops much more than the prevailing demand in the market. Secondly the shops of bigger size had even less takers since DDA had not taken care of the specifications required by big entrepreneurs. A DDA report has revealed that in certain cases, prices of commercial land/shops were unrealistic and actually exceeded free market prices. Consequent to this a revision of prices of plots/flats was made. It may be concluded that commercial land and to certain extent shops being DDA's major revenue earner a market-oriented approach to sell them would have been more appropriate.
In order to stop noxious and hazardous industries from operating within the Master Plan area the DDA has of late come-up with the proposal of switch over of the abovesaid activities to trading. Ten such industrial units have been taken up this in pursuances of this policy. This measure is still in an experimental stage. Further the analysis of the land allotment procedure reveals that the scope of the Land Allotment Advisory Committee (LAAC) was extremely limited. There was no other agency which could monitor the activities of the industry and take appropriate measure in case of violation of norms. The power and responsibility of the committee needs to be strengthened by giving it the function of monitoring industrial unit and preventing the violation of land-use or environmental norms.

While studying the distribution of plots/flats in the fifth chapter it was found that DDA's performance marks a significant departure from the avowed objectives. It was noted that distribution of land for co-operative plotted development clearly favoured the rich. In the initial stage, the emphasis was on auctioning of plots to the HIG in order to raise funds to cross subsidise the MIG/LIG plots. Eventually excepting for the five year period (1975-80) there was no significant supply of LIG plots. Infact the year 1975-76 witnessed supply of approximately 70% of all LIG plots disbursed by DDA till 1990. Since 1980 there had been negligible supply of either LIG or MIG plots. The supply of HIG plots were uniform over time while that of LIG plots were restricted to
a couple of years. Again, since the early 70s, DDA shifted its emphasis from co-operative plotted development to group housing. It is indeed true that the group-housing schemes have been successful but these have not benefited the poor. It was noticed that plots for group housing was sold at similar prices at different places in Delhi. Consequently the more influential among the riches cornered plots in attractive localities without paying the higher level of services available in this locality.

Similarly a study of spatial distribution of housing revealed strong pro-rich bias in choice of location for SFS dwelling units. The poor has been invariably allotted flats in less attractive localities. The temporal analysis of housing supply indicate that DDA's performance of supply of dwelling units improved considerably ever since floating of SFS schemes. Consequently the share of LIG/EWS housing to total housing supply decreased and became erratic with the advent of HIG housing.

DDA sources pointed out that availability of ready finance for SFS houses assured their prompt supply. This indicates that HIG housing was taken up not to cross-subsidise the poor but to improve the overall financial performance of the authority. Another important finding in this section pertains to the pattern of supply of dwelling units in Rohini. It was found that in the initial stages the emphasis was on supply of flats to the EWS, while the
supply of SFS flats took place after about 7 years. The distribution pattern suggests a deliberate move to send the low income group people in newly developed residential areas at a time when infrastructural facilities were not fully developed. However after a period of time when the residential colony matured with improved living conditions, SFS flats were constructed. Thus the distribution pattern of plots/flats suggests a bias in favour of the rich.

In the sixth chapter an attempt has been made to analyse the procedure for determining land prices by the DDA. The purpose of this study is to determine how the pricing policy of DDA has functioned since its inception and whether it has a sensitivity in favour of the poor.

It is noted that pre-determined price of land for disbursement of plots to the LIG & MIG basically consists of two components, namely, cost of acquisition and cost of development. While data on cost of land acquisition is provided by the Delhi Administration, the cost of land development is determined by the Engineering department of the DDA. It has been observed that there is not much spatial variation in the cost of acquisition. The costs of land development are also similar for all areas. Hence the pre-determined rates do not reflect much spatial variation. The open market prices on the other hand, varies significantly across localities.
There exists pronounced ad-hocism on the part of the authority in updating the pre-determined prices over the years. The rates have remained constant over certain time periods, registered negligible rise at certain time points and witnessed high increase of about 150% to 200% for certain other time points. It may thus be inferred that the distribution of subsidy over both time and space is uneven. It may be argued that the abrupt hikes in land prices would affect the late entrants in the shelter market adversely. Similarly the beneficiaries allotted land in the less attractive localities enjoyed lower quality of services although they would pay more or less the same rate as in more attractive localities.

A study of DDA’s auction price of residential plots showed that land prices in Delhi has increased annually at the rate of 20% to 24%. Open market land prices obtained for South Delhi localities also showed an average growth of 25% over the period 1990-91. However, as comparison between the auction rates and open market rates showed a gap of at least 60% for certain selected localities. It may be further assumed that the open-market rates obtained for the purpose of this study is underquoted. This suggests that actually the gap between the DDA auction rates and open market rates is much more than the above estimate. However public policies pertaining to urban land pricing has done little to remove this anomaly. Infact a study of "Market Rates" of residential land by DDA for different localities of Delhi revealed that the
spatial variation of land prices had decreased over time. This means that DDA does not consider the locational advantages and disadvantages in computing the land prices that determine the prices in the open market.

In case of pricing of DDA flats, it was observed that till 1989 increase of DDA rates has been much less than the open market rates. However, since 1989 there has been an sudden hike in DDA flat prices which has desirably reduced the gap between DDA prices and the open market prices. This kind of abrupt and arbitrary action has, however, invited wide criticism. It has been observed that there is not much spatial variation in flat prices. This is evident from the fact that cost of land included in pricing the flats do not vary much over space. The equalisation charges for South Delhi plots are not sufficient to reflect the variation in the level of amenities and consequently the open-market plot/flat prices. Thus, once again it is clear that the person who have purchased flat at an early stage or has been allotted flat in South Delhi areas has benefited more in terms of subsidies as well as infrastructural facilities.

A study of free market land prices from 72 localities in four zones of Delhi has shown that there is considerable variation in prices. South Delhi registers uniformly high land price while East Delhi registers land values uniformly lower than the average for Delhi. In North and West Delhi,
however there are both poor and posh localities and as a result the disparity in the land prices within the zones works out as significant.

A critical appraisal of the benefit-cost analysis of the Dwarka sub-city project indicated that DDA is unable to recover the total cost incurred in the project. It was also noticed that many of the expenditures on infrastructure incurred in the overall development of the city were not included in the cost side. Thus the land sold at supposedly "renumerative prices" is actually under valued and contains elements of subsidy.