

# The role of Land Use Policy behind unauthorized spatial expansion in rural areas of Islamabad

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## 1. Introduction

### 1.1 Background

In the last century, cities have transformed from isolated locations to interconnected centers of physical, social and economic activities (Hathout, 2002). In this regard, spatial expansion of human settlements either vertical or horizontal is considered a natural and inevitable phenomenon. As a result, the un-built land is gradually converted into built-up environment containing buildings and related physical structures. Spatial growth is guided for the welfare of general public through a number of spatial plans and policy guidelines. It helps them to get full benefits while lessening its potential negative sequel of growth (Cohen, 2007). Spatio-temporal growth, if carried in violation to the prescribed plans, often spills into protected lands, creating unplanned and unlawful built-up areas. This phenomenon of uncontrolled expansion misleads the spatial growth and threatens the available natural resources. The issues of unauthorized spatial expansion are becoming more important with increasing population and scarcity of land. Land use / land cover (LULC) change and its impact on settlements have become an area of focus due to its varied socio-economical and environmental consequences (Qiong, 2006). Severe violations of future development plans are observed mostly in developing countries, where approximately 70% of the urban residents live in irregular or informal settlements (Lasserve and Clerc, 1996). Although such unauthorized expansion may confine to specific locations and in a specific quantity, from the standpoint of urban planning institutions, its style can be more important than the amount of the expansion (Jieying et al., 2006). Spatiotemporal trends of expansion have become an area of focus for geographers and planners due to their varied socio-economical and environmental consequences (Qiong, 2006). Accurate and current information on their status is essential to formulate planning strategies, to evaluate the plan implementation and to identify alternatives.

### 1.2 The Study Area: Islamabad Zone IV

*Islamabad* Capital Territory (ICT) consists of five planning zones spreading to 906 km<sup>2</sup>. Its three zones, Zone I, II and V are reserved for planned urban development whereas the remaining two zones, III and IV, are managed as National Park and the rural periphery. Zone IV, the study area, spreads to 287 km<sup>2</sup> land, located from 33° - 36 to 33° - 48 latitudes and 73° - 6 to 73° - 21 longitudes (Figure 1). Zone IV has attained highest rate of spatial growth in ICT. Population of the study area has increased constantly since time, estimated to reach 460,000 persons in year 2007 as compared to 188,000 of 1998 and 81,000 of 1972 (GoP, 1998 and GoP 1972). Zone IV contains seventy villages spread around major traffic corridors. The site has is bounded by two regional roads *Murree Road* and *Islamabad Expressway* which connect the study area surrounding metropolitan cities of *Islamabad* and *Rawalpindi*. The study area is one of the main sources of vegetable supply for *metropolitan* and carries strong potential for subsurface aquifer recharge which has an estimated capacity of 2 Billion m<sup>3</sup> fresh water (JICA, 1998).

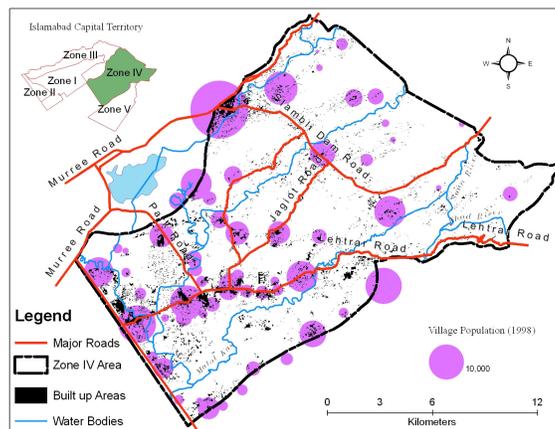


Figure 1: General map of the study area  
(Source: Islamabad Master Plan, 2000)

## 2. The problem: Unauthorized spatial expansion

Islamabad rural area is facing the problems of unplanned construction and expansion in rural areas, especially of Zone IV. Existing villages are continuously expanding on agricultural hinterland in a liberal fashion. The situation is creating an urban sprawl in the agricultural land which is affecting the planned look of the capital territory and is deteriorating the natural environment of the zone as well. In the study area, only 13% population has road access, 4.5% population has access to piped water supply and piped sewerage (CDA, 2005). Encroachments on the public 'Right-of-Ways' and CDA's land has been reported in number of areas as well.

The major problem is that the spatial expansion is taking place in violation to the original master plan of the Islamabad capital territory. In the master plan (1960 to present), Zone IV has been reserved as rural area of the territory, for holding national institutions & recreational facilities, without damaging its natural environment (Doxiadis, 1960). Outward expansion of its villages is not allowed in the master plan. Soil studies show that the land is sensitive to erosion; once the vegetation surface is disturbed, land is washed away (CDA, 1973). But the ongoing construction and expansion is damaging the natural resources and the planned growth of the area.

## 3. Materials and methods

Major reasons behind unauthorized spatial expansion in Zone IV were explored through unstructured interviews and focused discussion with CDA officials. Literature review regarding spatial growth in ICT and field visits of the study area were also carried out for this purpose. Five different departments of CDA (officially called 'Directorates') directly deal with physical development in Zone IV (i.e. Directorates of Estate management, Town planning, Enforcement, Law and Land).

A number of questions were asked to their officials to identify major reasons behind unauthorized growth (Appendix-1). Role of the authorities, problems faced by them in

implementation of rules, regulations and potential measures to improve existing policies were inquired through a number of questions designed for Key Informant Survey. The following departments of CDA were identified for data collection.

Questions were asked from the officials of development authorities and the results were elaborated in research findings. Questionnaires were further subdivided for officer and field staff of the department. Since the officer and the field staff have different duties so they were supposed to have different dimensions of experience needed to be explored.

Table 2: No. of questionnaires surveyed from different departments of Zone IV

Respondent			(No. of Questionnaires)
Development Control Authority	Capital Development Authority	Town Planning Directorate	2
		Enforcement Directorate	2
		Estate Management Directorate	2
		Law Directorate	2
	Islamabad Administration	Union Council secretary	2
		Islamabad Administration	2
<b>TOTAL</b>			<b>12</b>

The following documents were thoroughly reviewed which either helped understanding the context of the problem and the past efforts to tackle the problem.

1. Master Plan of Islamabad (1960)
2. Islamabad Capital Territory Municipal Bye Laws (1968)
3. District Census Reports of Islamabad (1972, 1981, 1998)
4. Regional planning study by Dorsch and Gollwitzer (1973)
5. Master Plan Integrated Rural Area Development Program JICA (1981)
6. CDA Internal Review of Master Plan (1988)
7. UNCHS Master Plan Review Consultancy (1991)
8. Islamabad Capital Territory (Zoning) Regulation (1992)
9. Islamabad Residential Sectors Zoning (Building Control) Regulation (1993)
10. Revised master plan for Zone IV, Islamabad (2005)

#### 4. Results and Discussion

The study has pointed out the following major reasons for unauthorized spatial expansion taking place in the villages of the study area.

i. Poor implementation of Master Plan

This is a major reason behind uncontrolled spatial growth in the study area. Previous studies on ICT emphasized again and again that neither uncontrolled urban expansion nor any alternative urban development plan would be suitable for Zone IV (e.g. CDA, 1988; UNCHS, 1991). And that the land should be acquired and developed according to the proposed plan. But, CDA could not follow the land acquisition and development plan of master plan. Sluggish land acquisition and development slowed down the pace of Master Plan implementation. As a result, trend of housing construction increased in rural areas of ICT (Hasan, 1992). Since 1990, Zone IV did not observe any major developmental activity. Settlements and institutions cover just 12% land of the zone and 88% of land is reserved for forests and farming or left un-built. Master plan implementation on only 12% area is inadequate to preserve its entire natural character. To date, one third of CDA owned land is unutilized and left vacant (MMP, 2006). Despite external pressures like the political allotments, high demand for farm houses and trend of constructing luxurious guest houses and residential bungalows at farmlands. As a result, poor plan implementation has triggered unauthorized growth in the study area.

ii. Absence of a comprehensive plan

In contrast to the modern concept of urban planning in the municipal area of ICT, land use plan could not be prepared for the National Park Area of Zone-IV. The concept of Islamabad Park could not be translated into a comprehensive land use plan as well. Rather the plans were usually designed and implemented as and when required. Such approaches led to the fragmented development of the area. For example CDA designed model villages as well allowed national institutions like universities and research centers, thus ending with a mix up land use planning for National Park Area.

The adopted plans were filled with arbitrariness and uncertainty about implementation and anticipated future impacts. As a result of it, expansion and construction is going on without site development and in violation to the master plan. CDA purchases land from local residents and develops it as per Master Plan guidelines. The authority could acquire only 20 percent land of Zone IV till year 1969. Since then, no land acquisition could not be made and CDA cannot impose master plan provisions on un acquired land. Similarly Islamabad faced an overemphasized urban development plan which almost neglected Islamabad Park and Islamabad rural areas.

iii. Poor development control

CDA has failed to exercise proper development control in the study area. Villages are expanding without any intervention due to poor development control. Expansion and construction is taking place without site development. Haphazard buildings and uncontrolled expansion has become a huge problem for Zone IV. The study area contained 3,000 housing units in 1960, estimated to have reached around 18,000 by year 2007.

iv. Duality of control

With a decision from Supreme Court in 1981, rural part of the ICT is presently being administered by ICT Administration by virtue of ICT Local Government Ordinance 1979. CDA has either little or no involvement in rural development activities. CDA can exercise its powers at acquired land only. ICT Union Councils are responsible for development control of privately owned rural land. CDA follows The Capital Regulations Act 1960 for development control in entire ICT. But the restrictions imposed on private land by CDA are not observed by ICT Administration and local authorities. Thus, Zone IV is being governed by two different authorities under two different policies. Approval of development activity was handed over to Union Councils of Islamabad Administration which could not practice the strict development control as of CDA. The result was obvious. The area of forests, rangelands and valleys is slowly being swallowed by illegal construction activities. (e.g. Forests of Banigala, Tumair and Maira).

Duality of control has resulted in an uncoordinated development and conflict of functions (Maria & Imran, 2006). Different types of governmental policies influencing development make it impossible to plan and manage land. It has been observed that when people decide to build against CDA rules, they take administrative approvals from UC authorities. Consent from CDA has become only a matter of prestige, because CDA approved development is economically high-valued in Islamabad. Since the residents of these settlements work in different areas of the capital so this is a more likely urbanization oriented population which cannot maintain the rural character of the area.

## 5. Conclusion

As per guidelines of the master plan, the Zone was delineated to provide agricultural base to Islamabad, as well as to hold national level institutions and recreational facilities (Doxiadis, 1960). Proper land management measures are missing, in this regard. In Islamabad, residential areas are being developed at a slower rate while the housing demand is high. Ever increasing difference in demand and supply of affordable housing is one of the major causes of uncontrolled development. It is still not too late to preserve some off the planned land uses. There is a strong need to provide affordable housing in ICT Zone II and Zone V in order to reduce the pressure of construction in Zone IV.

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