

PLANNING OF ISLAMABAD AND RAWALPINDI: WHAT WENT WRONG?

Sajida Iqbal Maria* and Muhammad Imran**

* Department of Anthropology, Quaid-i-Azam University, Islamabad, Pakistan

**Urban Planning Program, Faculty of Architecture, Building and Planning, The University of Melbourne, Victoria 3010, Australia

INTRODUCTION

Islamabad is one of the examples of modern urban planning undertaken shortly after the formation of the new state of Pakistan to serve as its capital city. The Master Plan for Islamabad was prepared in 1960 by considering Islamabad as a part of a large metropolitan area by integrating the city of Rawalpindi as a twin city. These two cities were considered highly dependent to each other in overall urban development. However, the original Master Plan covering the city of Rawalpindi was not put into practice. In fact, different planning and institutional arrangement was set up to develop urban areas in twin cities. This disintegration caused lot of problem, among them urban transport and housing are the most notable one.

From the last two decades, the economic growth of twin cities accelerated due to development of private housing schemes. However, physically integrated but institutionally disintegrated cities could not match the pace of rapid urban development. The purpose of the paper is to identify different kind of disintegrated areas responsible to create barriers for rapid private housing development in Islamabad and Rawalpindi. The focus of the paper is identifying the weakness of institutional arrangement for both cities to generate discussion. The paper will start with the planning concept of the original Master Plan of Islamabad in 1960s. Then, the research will describe to what extent twin cities were successful for implementing these concepts. The following section will detail the case study of Bahria Town to identify institutional and planning barriers responsible for making hurdles for private housing development. Finally, some finding will be discussed and conclusion and policy implications would be drawn to improve institutional arrangements for facilitating private housing development.

ISLAMABAD: THE ORIGINAL MASTER PLAN, 1960

After independence in 1947, Pakistan realized the need of capital city to serve the new state. Then, Islamabad, a new capital of Pakistan was conceived in 1959, planned from 1959 to 1963 by a Greek architect-planner C. A. Doxiadis, and started implementation in 1961. The important characteristics considered for planning of Islamabad at that time were as follows:

1. Site Selection

The site was selected by a process of scientific search tempered by political considerations (Botka 1995). The centre of gravity, network connection such as existing Grand Truck (GT) Road and proposed United Nations Trans-Asian Highway and topographical conditions such as a foothill of Himalayas from 1600-1900 ft. above sea level was considered the main factors for selecting site for Islamabad. Additionally, site was selected by its close proximity to the existing urban area of Rawalpindi. Rawalpindi helped in the development of Islamabad by providing the access to existing transport network, supplying labour for the development

and accommodating early inhabitants and offices for Islamabad (ibid).

2. Dynapolis

The original Master Plan of Metropolitan Islamabad was based on the principles of the 'dynametropolis – dynamic metropolis' comprised of Islamabad, Rawalpindi and National Park. It was proposed that Islamabad and Rawalpindi will expand dynamically towards south-west along with their centre cores (blue area- spine of central facilities) with least possible adverse effects in traffic (Frantzeskakis 1995). It was proposed that all three component of Metropolitan area will be connected by four major highways (1200 ft. wide), Muree Highway (now Kashmir Highway), Islamabad Highway, Soan Highway and Capital Highway, meeting at right angles. Among these four highways, only two highways (Kashmir and Islamabad) were built till now. Doxiadis (1967) argued that Islamabad could be differentiate from liner city in term of absence of size, dynamic in nature and its growth in uni-direction. Stephenson (1970) argued that the size of Islamabad was not mentioned in the original plan because urban dynapolis allow the city to develop according to the requirement. Overall, Botka (1995) found this concept very useful for long term benefit of the city.

3. Grid-Iron Pattern

The city was conceived into grid-iron patterns developed into 2 kilometres by 2 kilometres sectors segregated by the hierarchy of wide principal roads (600 ft.) comprising Islamabad and Rawalpindi area. The sectors were used for distinct land uses such as residential, educational, commercial and administrative. Pott (1964) shows his disappointment on the rigid grid-iron pattern and straight highways and hopes that this will be only in diagram.

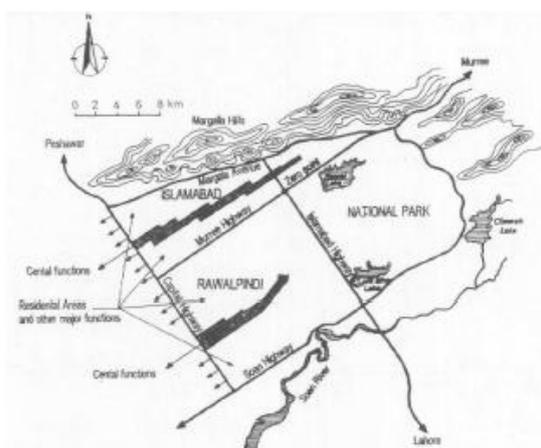
Housing is provided in grid-iron pattern sectors on disciplined hierarchy of communities according to their income groups. In the square grid of sectors, four communities clustered around an enlarged shopping centre. To slow down traffic, shopping activities were organized in the centre of a larger square settlement. Meier (1985) worried about the rigidity of the hierarchy and argued that accelerated economic development require more open social structure.

Fig. 1 Location of Islamabad



Source:
<http://archives.cnn.com/..map.pakistan.islamabad.gif>

Fig. 2 The Concept of Dynapolis



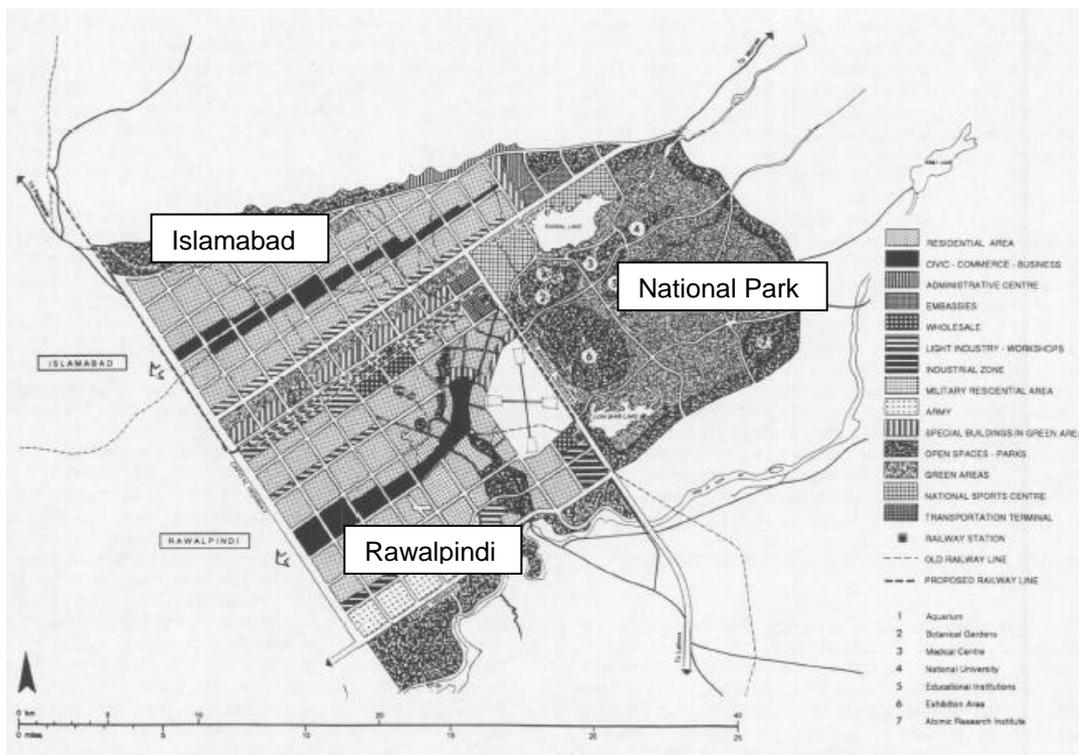
Source: Doxiadis (1965)

3. Transport Network

The grid-iron pattern of sectors was served by a hierarchically structured road network comprising a width of 1200, 600, 300 ft intersecting at right angles. Moreover, collector and local roads were proposed to serve the community. Botka (1995) argued that wide right-of-way is a strong identifying feature of Islamabad. He explained that such a hierarchy and width is best suitable for future traffic growth and high speed traffic movement. That is a reason why revision of Master Plan dismissed the argument of its over-dimensioned. In fact, revisions increased the width of right-of-way of the Capital Highway from 1200 to 1800 ft. Doxiadis planned Islamabad by perceiving high automobile per capita ratio. That's why a wide street was proposed along with 50-100 yard green strips. In reality, Islamabad could not get motorisation for which the city was planned. The other justification for wide highways was its use for future utility corridors such as water, high tension electricity line and gas pipelines etc.

In spite of the undulating Plain of Potwar having deeply eroded water courses, the main roads aligned straight. In fact, Doxiadis (1965) explains that there is no reason for the main roads to be curved, unless the form of the landscape compels us to do so. Taylor (1967) found that straight roads resulted roller-coaster gradients for some areas. He argued that in the presence of single story housing and absence of earth-moving machinery, plan fails to follow the natural contours resulted excessive cost of cut and fill, wastage of man made labour and dictation of pedestrian movements.

Fig. 3 Original Master Plan of Islamabad 1960



Source: Doxiadis (1965)

4. Economic Justification

There are many opponents of the creation of Islamabad on a fact that Pakistan cannot afford such a luxury (Pott 1964; Meier 1985). Pott (1964) argued that a country which has so few natural resources of wealth and where 80 per cent of the population are illiterate, huge

expenditure on Islamabad was unnecessary. Meier (1985) explained that Islamabad drain so much capital from the economy of the whole country as happened in Brasilia and Chandigarh.

However, Doxiadis (1965) demonstrated that the creation of Islamabad is more economical rather than investing on Karachi for functional use as a capital. He justified his approach by calculating per square ft. expenditure for creation of Islamabad and for existing capital of Karachi (Stephenson 1970). Additionally, Doxiadis had designed Islamabad in such a way that Pakistan could afford this city by proposing a labour-intensive approach for construction. However, Meier (1985) found that this approach slowed the pace of construction for Islamabad as big construction machinery was banned. Similarly, it was argued that new capital of Pakistan should represent all culture and social groups in Pakistan.

5. Institutional Arrangements

To implement the Master Plan, the National Capital Commission was dissolved and replaced by the Capital Development Authority (CDA) in 1960. CDA was assigned a strong power to plan, implement and control the development of national capital and its wider area of influence. Taylor (1967) found that only one qualified architect-planner, one architect and one town planner from Pakistan was recruited in the early days of Islamabad. All other works was completed by foreign architects and planners. In fact, there was clear lack of capacity at the early stage to deal with metropolitan planning for Islamabad.

ISLAMABAD: THE REALITY

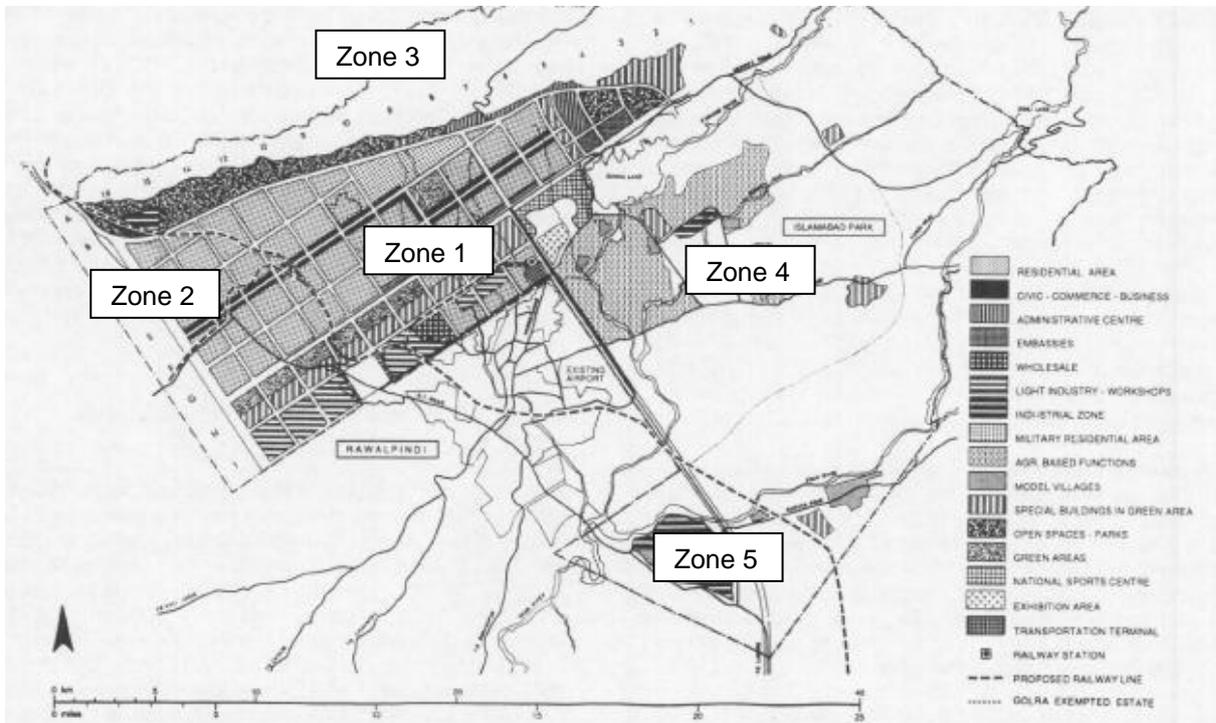
The original Master Plan of Islamabad, covering the urban area of Rawalpindi was never put into practice. The main reason behind this weakness is the lack of institutional development to implement the original Master Plan. The plan was a masterpiece in physical planning terms. However, the plan has focused on building hardware (physical infrastructure) as compared to develop software (institutional framework) necessary for implementing the plan.

In the absence of institutional framework, the Master Plan area was split into authorization of three different governments; Federal, Provincial and Local Governments. The Capital Development Authority (CDA) under Federal Government was established in 1960 with a mandate to guide planning and implementation of the National Capital. However, the authority of CDA was limited to the urban area of Islamabad. On the other hand, Rawalpindi was administrated by Rawalpindi Municipal Corporation, Rawalpindi Development Authority (RDA), Rawalpindi Cantonment Board and Rawalpindi Zila Council until late 1990s. RDA was under the provincial government and other organisations were working under local government. Under the devolution plan in 2001, Rawalpindi Municipal Corporation and Zila Council were dissolved and RDA came under the authority of Rawalpindi City District Government. In parallel, Punjab Housing and Physical Planning Department has played an important role for urban development activities in Rawalpindi. In short, all these organisations were responsible for planning and urban development of Rawalpindi. Dogar (1985) found that there is no legal framework to facilitate coordination between the CDA and provincial and local departments involved in Rawalpindi. Therefore, no solid commitment has been seen to implement the Master Plan in Rawalpindi.

Botaka (1995) found that Rawalpindi played a very important supporting role in term of accommodating initial government offices and personnel at the initial development stages of Islamabad according to the concept of dynapolis. In turn, organisations responsible for the development of Rawalpindi received very less resources as compare to Islamabad. The reason is that Rawalpindi is the responsibility of the Government of Punjab and local government department working in the city which has limited financial capacities. In Pakistan, federal government collects 92 per cent of the gross revenues and the provincial and city governments collect only 8 per cent. The revenue base of every province [in this

case Punjab Province] and city government [in this case local governments working in Rawalpindi] is very limited and heavily dependent on federal government grants (Husain 1984). In the urban area of Rawalpindi, the federal government has no formal constitutional control over planning agencies or development activities. In practice, the resources were allocated for CDA but not for organisations working in Rawalpindi.

Fig. 4 Revised Master Plan of Islamabad 1991



Source: Capital Development Authority, Islamabad

Similar differences were found in the human resource capacity of organisations responsible for Islamabad and Rawalpindi. The lack of professional staff is evident in organisations responsible for Rawalpindi. In short, imbalance resource allocation in the favour of Islamabad as compared to counter part Rawalpindi, absence of properly planning capacity and most of all, the administrative fragmentation of Islamabad and Rawalpindi are the main barriers to implement original Master Plan of Islamabad.

Under the influence of above mentioned fragmentation, the original Master Plan was officially abandoned in late 1970s. CDA started the revision of Master Plan with the help of UNDP and UNCHR. On the other hand, Punjab Housing and Physical Planning Department started the preparation of new master plan for Rawalpindi. In fact, a concept of original Master Plan as one metropolitan area was divided into two different master plans. The revised Master Plan for Islamabad has become official document in 1978.

Another systematic revision of Master Plan for Islamabad was started in the mid 1980s. The review effort was accomplished through in-house expertise of CDA and with the assistance of UNDP experts. The most important change of this revision came in the form of Islamabad Capital Territory (ICT) Zoning Regulation 1992. Under this Zoning Regulations, urban areas of Islamabad were divided into five distinct zones. Zone 1 constitutes existing and some future grid-iron sectors for housing, education, commercial (Blue Area) and administrative area. Zone 2 comprised periphery of Islamabad mainly reserved for private sector to invest in housing development. Zone 3 includes Margallah Hills National Park. Zone 4 contains

Islamabad Park and rural areas. Zone 5 controls the southern Islamabad and reserved for private housing development as well. These categories of Zones were clearly marked on the map of Islamabad. However, there was no physical boundary existed to separate Zone 5 from the urban areas of Rawalpindi. In fact, original plan to build Soan Highway segregated these areas. However, both revisions of original Master Plans are silent about the status of Soan Highway.

Like Islamabad, Rawalpindi also developed their own Master Plan. First RDA has prepared Guided Development Plan in which Ring Road around existing urban areas was the main proposal. However, the Master Plan for Rawalpindi prepared by the Punjab Housing and Physical Planning Department was officially approved in 1998. Both plans have considered urban areas of Rawalpindi by ignoring the development happening in Islamabad.

In the mean time, Islamabad and Rawalpindi has become one urban entity and strong influence on each others. The economic activity, housing development, urban transport planning, provision of utilities, employment opportunities and environmental protection cannot be separated into two different cities. For example, Rawalpindi has to bear the demand of which the development of Islamabad could not meet especially lower income groups. This put a pressure on the urban area of Rawalpindi. In fact, development of Islamabad is happened at the cost of Rawalpindi.

In early 1990s, the economic growth of twin cities accelerated due to development of private housing schemes. However, physically integrated but institutionally disintegrated cities could not match the pace of rapid urban development. In fact, disintegrated provisions generated several barriers for private housing schemes. The case of Bahria Town, a largest private housing scheme, is one of the examples which lies both in the area of Islamabad and Rawalpindi will be discussed in next section.

In conclusion, implementation of original Master Plan of Islamabad was limited to Islamabad and the National Park due to absence of necessary institutional arrangement to incorporate urban area of Rawalpindi. In fact, Islamabad and Rawalpindi was a part of Metropolitan area described in the Master Plan but dealt differently.

CASE STUDY: BAHRIA TOWN (Pvt.) Ltd.

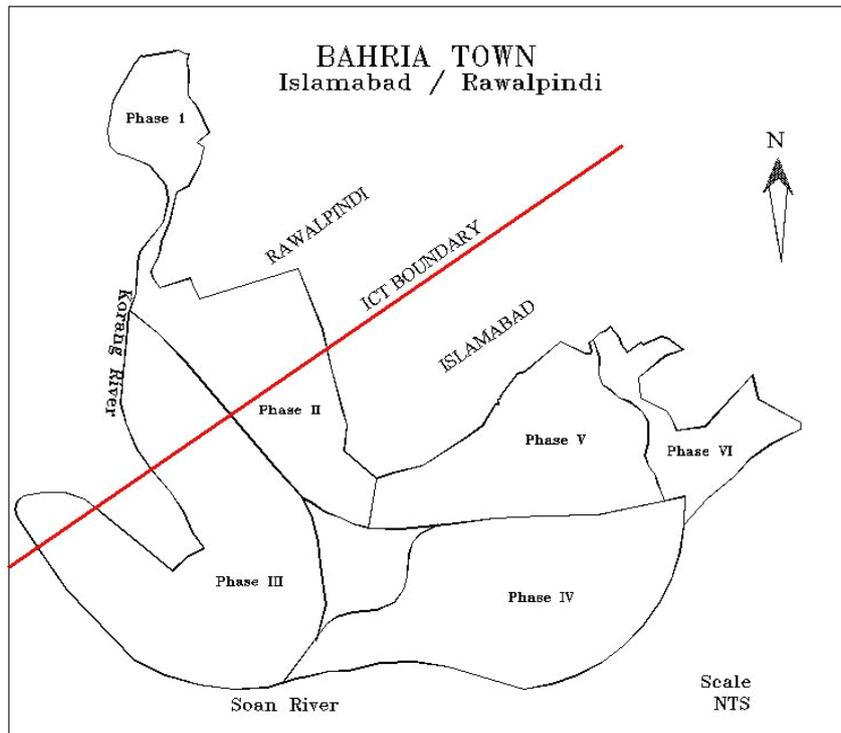
After the 45 years of original Master Plan of Islamabad, it is well recognized that planning lack to cater the housing needs of large proportion of population (UNDP 2002). It has now become well established that the public sectors has been unable to meet the growing demand of the population. The attempts from the public sector can only be accessible for small proportion of population. Therefore, it is recognized that at least two Zones should be reserved for private sector to meet the growing demand for housing provision.

Under the ICT Zoning Regulation 1992, Zone 2 and 5 was reserved for private housing development in Islamabad. In Zone 2, private sector will be allowed to acquire land and develop residential schemes in accordance with the rigid grid-iron pattern residential sectors planned in Zone 1. However, in Zone 5, private sector can develop housing scheme according to the acquired area of any shape. But, the area should not be less than 100 acres in total. CDA is responsible for the approval of the detailed lay-out plan according to their specified standards. The developer is responsible to provide independent accesses and roads, water supply and primary sewerage treatment systems to their housing scheme.

CDA described six stages for approval of private housing schemes in these Zones. They are 1) Preliminary Scrutiny Clearance 2) Permission for Advertisement 3) Approval of Lay-out Plan 4) Approval of Engineering Designs 5) Final No Objection Certificate (NOC) and 6) Completion of development work of road and services (<http://www.cda.gov.pk/index.html>).

Up to 2006, 20 housing schemes were initiated and under approval process in Zone 2. Similarly Zone 5 attracted 26 housing schemes in private sector at the same time period. Bahria Town is one of the largest housing schemes started in early 1990s under the private sector in Zone 5. Bahria Town (Phase 1 to 6) is located at a distance of 16 kilometres from Zero Point of Islamabad (intersection of Islamabad Highway and Kashmir Highway) and 4 kilometres of CBD (Sadar) of Rawalpindi www.bahriatown.com.pk. Bahria Town lies both in jurisdiction of Islamabad and Rawalpindi. The boundaries between Islamabad and Rawalpindi are not very clear in the area of Bahria Town. In reality, there is no physical boundary between two urban areas. The revisions of Master Plan for Islamabad were silent about the original proposal of Soan Highway to separate the area according to the original Master Plan for Islamabad in 1960. The land is not acquired and no formal planning and design were conducted for Soan Highway as prepared for other three highways (Islamabad, Kashmir and Capital) according to the original Master Plan of Islamabad. This lack of information is hurdle for preparing lay-out plan of Bahria Town. Moreover, Bahria Town require to approved the housing scheme both from CDA and development authorities in Rawalpindi.

Fig. 5 Location of Bahria Town in Islamabad and Rawalpindi



Source: Capital Development Authority

According to ICT Zoning Regulation, 1992 for development of private housing schemes in Zone 5 of Islamabad, Capital Development Authority (CDA) has framed modalities and procedures. The important features of planning application procedures are to prepare lay-out plan under following planning standards:

- | | |
|---|-------------------|
| • Residential (min. plot 200 sq.yard) | not more than 55% |
| • Open/Green Spaces/Parks | not less than 8% |
| • Roads and Streets (min. width 40 ft.) | not less than 26% |
| • Graveyard | not less than 2% |

- Commercial and parking not more than 5%
- Public buildings e.g. school, hospital, community centers etc not less than 4%

On the other hand Rawalpindi Development Authority (RDA) need entirely different standard for the approval of Bahria Town housing scheme in their area. RDA standards are as follows:

- Residential not more than 65%
- Open/Green Spaces/Parks not less than 7%
- Roads and Streets (min. width 30 ft.) not less than 25%
- Graveyard not less than 2%
- Commercial and parking not more than 2%
- Public buildings e.g. school, hospital, community centers etc not less than 2%

Similarly both authorities have different engineering standards for the approval of Bahria Town. Along with these standards, the present procedures of housing development in Islamabad and Rawalpindi results in different planning approval process. Bahria Town (Phase 1 to 6) is solid pieces of land having similar strength and weakness. However, as a part of both Islamabad and Rawalpindi, they require to develop the township with different standards. Moreover, there is big variation of institutional and professional capacities of CDA and RDA. Therefore, Bahria Town needs different time frames for the approval of housing schemes.

Private sector always brings new ideas and standard to attract people. Similarly, Bahria Town design their streets according to the design picked from Reston, Virginia, USA. However, they could not find the same institutions existed in USA to implement their innovative ideas. In fact, their global perspective has lot of difficulties in local settings. The institutional barriers are discouraging Bahria Town to play their role for providing housing in the area. All these factors affect their reputation and service delivery as well as community need for housing.

In short, planning in Islamabad and Rawalpindi discourages to meet the demand of private sector for guiding and controlling development. Private sector need more efficient and open institutional framework to implement their plans. This is only achieved by considering Islamabad and Rawalpindi as a part of metropolitan area have same planning standards and guidelines under one organisational set up. The current rigid Master Plan practices by CDA and RDA is not according to the demands of private sector. The efforts should be required to replace rigid system of Master Plan with Spatial Planning along with true involvement of community and private sector.

DISCUSSION AND CONCLUSION

The implementation of the Master Plans for Islamabad and Rawalpindi prepared by C.A. Doxiadis in 1960, presents a complex picture of achievement and failure. The original Master Plan for Islamabad was based on outstanding urban design by considering whole metropolitan area. The plan was a rigid as well as flexible in nature and well implemented in the new urban areas of Islamabad. However, the plan fails to accommodate existing urban area of Rawalpindi. CDA implement the plan easily in vacant areas but fails to implement the plan where complex situation arise with Rawalpindi. The decision for building Islamabad close to the existing city of Rawalpindi was a very wise one. Similarly to incorporate the urban area of Rawalpindi in the Master Plan for Islamabad is relevant today as well. These decisions immediately helped Islamabad to better start. However, due to absence of proper institutional arrangement, original Master Plan has become weak and problems were

gradually appeared (Botka 1995).

The research was not agreed that original plan was overambitious – attempting to accommodate the urban area of Rawalpindi. In fact, the plan was weak to develop institutional framework necessary to deal whole metropolitan areas. Overall metropolitan planning should be the responsibility of one organisation. However, many organisations in three hierarchal government orders were become responsible to implement original Master Plan for Islamabad. In the hierarchy, CDA under the Federal Government was well equipped with technical people and finance to deal with the spirit of planning for Islamabad. On the other hand, Rawalpindi Municipal Corporation, Rawalpindi Development Authority (RDA), Rawalpindi Cantonment Board, Zila Council, and more recently Rawalpindi City District Government were inadequate technical and financial resources to implement Master Plan of Islamabad on the urban areas of Rawalpindi. In fact there is no proper coordination mechanism developed to fulfil the objectives of original planning. In reality, all organisations are working in their own planning and policy guidelines.

Moreover, Islamabad absorbed the lion's share of resources for development; even higher than the average spend on other cities. On the other hand, Rawalpindi received much less resources and developed very low level of service standards. Moreover, Rawalpindi had continuously absorbing huge overspill of low income government servant which could not accommodate in Islamabad or could not bear the cost of living in Islamabad (Botka 1995). Rawalpindi needed at least the same level of financial resources and professional staff as provided to Islamabad. However, it seems very difficult to provide these resources to Rawalpindi in existing institutional arrangements.

Due to these imbalances of resources, urban area of Rawalpindi was developed with ineffective land use planning and control. However, there are some good examples of housing development in the area by the initiative of private sectors. Bahria Town as described earlier is one of the good examples of such housing development. But, Bahria Town is facing problem due to planning and institutional fragmentation among Islamabad and Rawalpindi. The lack of proper institutional framework are creating major barrier to attract further private investment in housing sector for Islamabad-Rawalpindi Metropolitan areas. It is now well recognized all over the world that the planning is no more responsibility of the public sector alone. Now planning can only be successful by the involvement of private sector and community groups. Therefore, the need for coordination of all these sectors at the metropolitan and even regional scale has become imperative.

What is very much needed in the present era is to establish a Metropolitan Development Authority by merging CDA and different authorities in Rawalpindi to receive high level of resources and professional staff to meet the challenge of twin cities. In long term, an orderly and complementary growth of twin cities can only be ensured within the framework of metropolitan organisation, in spite of all legal and planning difficulties involved in such approach. In short term, development of coordination mechanism between authorities of both cities and formulating new and similar planning standards for private housing development can be adopted. In fact, CDA have to take more active and bold role in this respect, since federal government have more resources. Only Metropolitan Development Authority with simple and efficient planning measures can attract private investment required for rapid transport and housing needs of the area.

This research contributes to explore institutional aspect required to meet new challenge of planning in twenty first century. This discussion will help to made conclusion that without developing institutions, the best planning cannot be successful. The research will make a significant contribution to the institutional planning according to the emerging demand from the private sector.

REFERENCES

- Botka, D. (1995), 'Islamabad after 33 years', *Ekistics*, 62, pp.209-235.
- Capital Development Authority (CDA) (1993), 'Modalities & Procedures: Framed Under ICT Zoning Regulations, 1992', Islamabad.
- Dogar, N. (1985), 'The Twin City of Islamabad/Rawalpindi: An Evaluative Study of Twenty-Five Years of Plan Implementation', unpublished M.Sc. thesis, Asian Institute of Technology, Bangkok.
- Doxiadis, C. (1965), 'Islamabad, the Creation of a New Capital', *Town Planning Review*, 36(1), pp.1-28.
- Doxiadis, C. (1967), 'On Linear Cities', *Town Planning Review*, 38(1), pp.35-42.
- Frantzeskakis, J. (1995), 'Configuration, Hierarchy and Spacing of the Urban Road Network in Islamabad', *Ekistics*, 62, pp.236-241.
- Husain, I. (1984), 'Raising Resources for Development', in, Burki, S. and LaPorte. R. (Eds.), *Pakistan's Development Priorities: Choices for the Future*, Karachi: Oxford University Press, pp.103-136.
- Meier, R. (1985), 'Islamabad is already Twenty Five', *Ekistics*, May/June, pp.212-216.
- Pott, J. (1964), 'Impressions of Islamabad – West Pakistan', *Housing Review*, 13(3), pp.49-52.
- Stephenson, G. (1970), 'Two Newly Created Capitals: Islamabad and Brasilia', *Town Planning Review*, 41, pp.317-353.
- Taylor, N. (1967), 'Islamabad, a Progress Report on Pakistan's New Capital', *Architectural Review*, 141(841), pp.211-216.
- UNDP (2002), 'Katchi Abadis and Some Viable Alternatives: A Case Study and Operational Guidelines based on the Capital Development Authority, Islamabad's Approach 1998 to 2000', Islamabad.

Website Cited

- <http://www.cda.gov.pk/index.html> visited on July 19, 2006
- www.bahriatown.com.pk visited on July 19, 2006