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CONTENTS

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EDITORS' NOTE

The papers included in this volume of JRAP were presented in the Eleventh Seminar on Urban and Regional Planning, which was held on 25th and 26th March, 2016 at the Department of Architecture and Planning, NED University of Engineering and Technology, Karachi. The theme of the seminar was "Urban Planning and Institutional Arrangements".

The first paper included in this Journal was delivered as a keynote speech by Professor Paul Taylor, from the Department of Geography and Planning, Cardiff University, UK. This paper has been modified for this Journal. This paper presents an international history of the urban institutional development, defining important terminologies in the process and identifies the shortfalls of current institutional arrangements and institutional problems specific to planning. This paper also proposes a road map that can be undertaken for capacity building and for promoting institutional development.

The second paper included in this issue gives a comparative outlook of the various provincial local government systems in Pakistan. It debates that since democratic governments in the country have failed to implement local government plans thus power has always remained centralized and the autonomy of local governments has always been jeopardized.

The third paper accentuates the institutional policy reforms needed in cities of Pakistan for mixed use urban planning, including commercial and residential land uses. The underlying hypothesis of this paper is that land use planning is directly related to transportation and environmental problems, thus effective planning can help achieve sustainable neighborhoods.

The fourth paper included in this issue, attempts to understand the relationship between community organizations, physical characteristics and the residents' strategies for crime prevention and control in the neighborhoods of Lahore. The conclusions of this paper point towards the fact that population heterogeneity, spatial dynamics and a general lack of social control are important predictors of criminal violence.

The fifth paper included in this volume gives an historical overview of the public transport evolution in Karachi, highlighting the reasons behind the failure of various public transport projects and the way forward for the recent intervention of the Bus Rapid Transport System.

This issue of JRAP has a book review of a publication entitled 'The Majestic Monuments of Lahore' authored by Anjum Rehmani.

Editorial Board

PLANNING AND INSTITUTIONAL ARRANGEMENTS

*Paul Taylor**

ABSTRACT

Up until the 1970s planning was the dominant paradigm for delivering urban development. But it had fallen from grace by the 1980s and since that time planning has rather been in the doldrums. During that period there has been an international debate about the future of planning that has been related to its capacity to deliver results and the costs that it incurs in endeavouring to do so.

One of the reasons for planning's problems has been the criticism that it has been onerous in its institutional requirements, requiring a lot of expensive skilled personnel to deliver sometimes meagre results over long periods. The institutional regime required to implement plans was seen as complicated and legalistic, laying heavy burdens on administrations that were already struggling to cope with explosive population growth and rapid socio-economic change.

As the Global Coordinator of the Urban Management Programme (UMP), which by the late 1990s was world's largest technical assistance programme operating in Africa, Asia, the Middle East and Latin America and financed by the World Bank, UNDP, UN-Habitat and many bilateral donors, the author was one of those grappling with these issues.

The UMP was confronted by the need to get to grips with urban administrations that were failing to tackle the problems that confronted them. Planning, because its grandiose ambitions for comprehensive solutions which it frequently failed to deliver, was seen as part of the problem, not the solution. Planning-derived visions often were viewed as utopian delusions with little relevance to the real world. Nevertheless things have changed again since then, and this paper presents a history of planning to identify the themes of the emergent paradigm and identifies problems with current institutional arrangements.

A RECENT HISTORY OF URBAN INSTITUTIONAL DEVELOPMENT

This section reviews the evolution of thinking on institutional matters that has taken place in response to the challenges facing cities generally, and planning in particular.

After its emergence in the late 1980s/early 1990s the UMP commenced practical interventions in technocratic urban management at city level dealing with poverty, environment, land, and finance. Managerialism was the dominant ethos with the primary concern being for more efficient and effective provision of social services to citizens through local government bureaucracies.

As a result of the limited impact of the managerial list model on changing the performance of city administrations, from the early 2000s urban governance became the dominant paradigm in UMP, and was adopted by a number of other global programmes – Local Agenda 21, the Sustainable Cities Programme, etc.

The enthusiasm within UN-Habitat for improved urban governance as the antidote to the problems of city administration was made evident in its promotion of the Urban Governance Campaign that continued more or less until 2007 (UNCHS, 1989). It advocated for the key elements of good urban governance – accountability, transparency, participation, subsidiarity, effectiveness and equity – as the means by which city performance could be improved.

Planning as a key ingredient of improved urban administration came back into contention in 2006. The Vancouver World Urban Forum and the associated World Planners Congress were the key events in ushering it back into consideration as a development tool (Habitat III, 2016). A document called "Reinventing Planning: A New Governance Paradigm for

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Managing Human Settlements" was endorsed by representatives of the world's major planning organisations. It deliberately created clear blue water between itself and traditional planning. It viewed planning as less an instrument of government and more a process of good governance because demand driven planning is more dynamic and more effective. Furthermore, the special contribution that planning could make was seen as being derived from a quality intrinsic to the discipline: that of integrating social, economic and environmental considerations in human settlements development. Good governance on its own does not have this integrative capacity.

Participation was the watchword in all these latter phases of thinking regarding governance and planning. Getting citizens involved in the identification, selection, implementation and monitoring phases of city activities was felt to be the key to better results.

Decentralisation to local government was an important part of the mix and a constant theme throughout these convolutions of change in the dominant paradigms. It was felt by almost all players that the closer government got to the people, the more likely it was to become responsive to their needs and demands.

One important observation emanating from the above is that although many problems in urban development and planning are institutionally derived, the emphases of many of the solutions considered were not purely or even primarily jurisdictional in nature. In other words, other things, particularly those concerned with "soft" matters – such as those that are related to cultural or process considerations – were also important.

DEFINITIONS

This section defines some key words used in the paper.

The most important term is institution. It is often thought of as synonymous with the term organisation, and indeed some dictionary definitions make it so. But institutions are really "organisations plus". Institutions are entities that set the rules of the game. In other words although they frequently include organisations, sometimes they don't and exist, for example, as legal constructs. Marriage for instance is a recognised institution – it sets the rules of the game, even though there is no entity, club, society or association that is connected with it. This notion of the culture, ethos and norms associated with institutions is important for the argument that follows.

Organisations may be described as groups of people banded together to advance a common purpose. The commonality or glue of an organisation is not so much its values and more the existence of structures that define relationships. This is not to say that organisations don't have values, but they are subsidiary. The more important the values and the more they are relevant to larger society, the more akin an organisation becomes to an institution.

Urban governance on the other hand is the sum of the many ways in which individuals and institutions, public and private stakeholders, plan and manage the common affairs of the city. It refers to the relationship between civil society and the state, between rulers and the ruled, the government and the governed. It is this latter aspect – the relation of civil society to the state – that distinguishes governance from government. It is more about process than structure.

As can be seen from a comparison between the above definitions and the preceding description of the unfolding of thinking in recent years, there are no neat categories that arguments fall into. There is a mixture of ideas, all of which have merit, that mesh almost seamlessly between the different categories described above. One cannot therefore limit oneself to the notion of organisational restructuring and administrative reform that the use of the term "institutional" might seem to imply.

PROBLEMS WITH CURRENT INSTITUTINAL ARRANGEMENTS

This section takes a broad overview of some of the structural problems faced by the institutional set-up of the entities that govern planning. Particular mention is made of the problems faced by burgeoning metropolitan regions, which pose problems of scale and complexity for the entities that govern them that have not been faced before in human history. Exclusion and poverty still stalk our cities and these problems are particularly intractable at the metropolitan level, whose populations are engulfing contiguous cities and adjoining rural areas at a breathtaking rate. The impact of climate change and the consequent increased incidence of natural disasters in terms of adaptation, mitigation and resilience complicates the burden. The scale and complexity of the new city regions multiplies the difficulty in addressing these problems.

There is a range of entities found at global, national, regional, local and civil society or stakeholder levels that are involved in the institutional framework. But the trick is getting entities to cooperate. No single institution can accomplish everything

alone.

There is no doubt that ill-defined distributions of responsibilities between tiers of government leads to both a duplication of roles and administrative voids. This leads to "backlogs in budget spending, higher transaction costs…. wider economic inefficiencies, as well as compromising transparency and accountability" according to one authority. Indeed, in many countries, not only do legal frameworks fail to support horizontal and vertical cooperation between governments, but also actually hinder it through prohibitions often designed to ensure the hegemony of central institutions. This tension is frequently witnessed at negotiations at the global level, where national governments sometimes treat local governments and civil society as competitors in a zero sum game in the allocation of power.

Integration is therefore a key word in the discourse about planning and that function has to reside in a strategic body. This may not be a major problem for smaller and medium size entities where a single authority, depending on the context, may have jurisdiction over most or many of the planning matters that require coordination.

But there are particular problems for large urban areas, especially metropolitan areas that have to address long term issues of transport, solid and liquid waste management, water and watersheds, energy and other issues that often are not confined to boundaries of officially demarcated districts and communities (Sellers, et. al., 2009). These sectors have catchments and spillover effects that easily reach beyond conventional civic boundaries. There are often boundary and edge issues, for example, with cities' built-up areas overspilling city boundaries into peri-urban and rural areas, with multiple consequences. This creates not only problems for management and financing of the individual cities but leads to and reinforces imbalances and inequalities between cities and regions in terms of poverty, demography, infrastructure, etc.

Local authorities at district and community level tend to be only marginally engaged with planning issues that fall outside the short term and perhaps medium term concerns of specific localities and communities. They may even compete and engage in wasteful competition, particularly when there are different political parties at the helm of adjacent local authorities. Economies of scale and agglomeration - those engines of city economic growth are compromised by parish pump politics that exploit local grievance and detract from the comparative advantage that larger settlements can offer.

The dynamics behind the need for integration is therefore to lodge strategic planning and decision-making powers at the more elevated levels in the hierarchy, particularly the regional level.

But there is a countervailing imperative at work. It is now accepted as conventional wisdom that planning can only be effective if it is embedded in an institutional framework of stakeholders who contribute to the formulation, impact assessment and evaluation of alternative strategies. But participation of stakeholders becomes more relevant and successful in more immediate and local issues. The danger is that this local decision-making is mainly short termist. The more abstract and remote from local level discussion of policies decision-making becomes, the harder it is to retain the engagement of stakeholders. The skill level required to make participation successful at regional level becomes that much more demanding: running meetings, sensitivity to minorities, realistic objectives, resistance to capture by elites or special interests, understanding of and sympathy with informality, fairness: demands high calibre professionals. The risk is that if bodies undertaking strategic and integrational functions do not have these capacities they forsake the possibility of benefiting from the responsiveness and vitality intrinsic to a participatory approach and become bureaucratic, remote and inefficient.

Some commentators grappling with this issue have tried to overcome this disjuncture by emphasizing governance at the expense of government. Indeed, enthusiasm for governance in some quarters has elevated it to the level of a panacea. The argument runs thus: if the process of governance and participation is sufficiently embedded and therefore, powerful at the local level, it can overcome the problem of jurisdictional competition and decreased stakeholder interest at regional level through a natural widening of the scale of voluntary cooperation by stakeholder groups. In other words if participatory governance is strong enough it can overcome the short-term focus inherent in the approach.

Selecting specific issues that have "synergetic potential" can increase the chances for success of a participatory approach at regional and metropolitan level. These can become the basis for more specific institutional arrangements, usually in the form of thematic working groups and a steering committee.

One way of achieving this is to try and embed short term actions within a long term vision that encompasses larger areas. This was tried by Local Agenda 21 in Nakuru, Kenya

where an attempt was made to incorporate the peri-urban area into the planning framework, based on participatory approaches.

However, this and other similar propositions for using the power of participation to overcome the bureaucratization of formal structures have bumped up against the common constraint that they lie outside the mainstream government decision-making process. Funding and implementation arrangements were particularly problematic. As a consequence, results remained marginal to the development process and replicability and upscaling remained undeveloped.

Proponents of the primacy of a governance approach are often neglectful of the weakness of civic culture in many areas. Undue respect for authority figures, a weak sense of voice, the primacy of ethnicity, etc. all undermine a willingness to engage with local governance.

There are other problems that the current urban institutional arrangements do not address. Although the problems of metropolitan regions have been emphasized here, most population growth in the developing world will take place in small and intermediate cities. Yet others face the problem of declining cities particularly, but not exclusively in the North (China has many declining cities). Sometimes these problems coexist in one country. However, these cities face the significant institutional problems, not least in terms of attracting and retaining the skilled staff needed to address their specific problems, including planning staff.

Not only are there horizontal problems of relations between cities, there are also vertical problems of disconnects between national and subnational governments at all levels. It is a natural role of national government to ensure balanced regional socio-economic development but the reality is that there are rarely strategies and policies to encourage coordination between the levels.

This phenomenon becomes particularly evident with regard to discontinuities between national plans and urban/ local plans, as the two rarely mesh, due at least in part to deficient institutional arrangements.

This disconnect is common to many institutional regimes. A silo culture commonly exists within national and local government units that diminishes the likelihood of voluntary collaboration both within and between entities. I would therefore argue that strategies are needed to address the soft element of institutions, that is their culture, norms and values,

if the changes are to be effectives needed to grapple with the problems of fragmentation, ineffectiveness, and lack of coordination. It will require a concerted effort to change the current cultural imperative and to convert local government organisations into institutions that have cooperative cultures.

In sum, the burden of institutional challenges faced by sub-national institutions, both in terms of deficits in structures and in the cultures that dominate them is daunting. Indeed, it is argued here that there is a common global deficit in terms of what should constitute adequate institutional arrangements for sub-national management and planning.

INSTITUTIONAL PROBLEMS SPECIFIC TO PLANNING

Problems faced by planning have been touched upon in this paper as a subset of wider institutional issues described previously. But there are some issues specific to planning.

First of all planning has a vision problem, both with the public and in terms of its own self-perception. It draws its historical inspiration from comprehensive control and management of change through the medium of landuse, a legacy at least in part from the heyday of the planned economy. Sometimes planners are more loyal to these professional methods derived from previous eras and other traditions rather than situational or contextual requirements in which they operate.

Second, if planners are not sensible to social and economic change their work quickly becomes outdated and ignored. It also means that they are isolated from the entities within which they need to work and contribute to the silo culture.

Many parts of the planning profession have moved on from this, but the inheritance is still there. It is discussed later in the paper that a new paradigm of modernised planning contains within it the seeds of positive change not only for the pursuit of good planning but also as an institutional support for all local government operations. But in the meantime it has the legacy problem of sometimes being seen as being at odds with requirements of stakeholder driven governance initiatives.

Third, macro-economic development planning by national governments is rarely systematically translated into spatially specific investment plans other than those implemented by sectoral ministries. Even in China, where urban planning is perceived to be the handmaiden of economic planning so as to materialize economic development - and this relationship

is generally thought to be successful - there are significant problems (Ding, et. al., 2009). In reality local land use plans in China are non-economic in nature and little is done to make cost-benefit assessments of competing land uses. Planners rarely have the skills to fulfill this important task (nor, it might be argued, have economists been educated to understand or appreciate spatial considerations). Local land use planning cycles are unsynchronized with national plans. Although one may argue it is not the job of local planners to implement national government dictates, there is also a need to ensure some basic level of harmonisation.

INSTITUTIONAL CHANGE

It has been established in this paper that the institutional framework in many countries is not up to the mark and critical reforms are needed. However, there is no silver bullet to fix problems resulting from institutional deficits. The components of reform have been addressed here one-by-one.

First, countries need to develop effective systems of multi-level governance. This is a framework based on suitable decentralization policies that will assist in the creation of a balanced and collaborative system of properly managed cities with productive urban-rural linkages. The framework is not a simple hierarchy, but should be seen more as a network of relationships between cooperating entities. A key word for the relationship is once again integration a term that will re-occur again below.

Second, and this is what makes multi-level governance an institutional relationship rather than an organizational one, is the culture of interactions both within and between entities of enhanced integration and cooperation. One author calls this institutional collective action when it has emerged organically without government intervention (Auzins, 2004). He conceives this as a web of voluntary agreements and associations that provides the adhesive to hold fragmented communities together.

Unfortunately, however desirable institutional collective action is, it cannot be relied on to emerge naturally given that there are many countervailing forces. National governments are theoretically best placed to foster the culture of integration throughout all layers of government by consciously valuing and rewarding collective achievements by entities. They are also able to facilitate the required dialogue concerning the substance of these relationships by actively initiating and brokering discussions. But very few governments are doing this at the moment.

Once sub-national governments start echoing the theme of cooperation a virtuous cycle of integration can be commenced.

The institutional culture has been emphasized here as a much neglected theme. How the new culture manifests itself will depend on local circumstances it can range from informal cooperation between entities to structured relationships governed by prescriptive regulation. The point is that no matter what the driving imperative is, it has to become the default norm for institutional relationships and workforce behaviour in all countries.

Third, these relationships are best carried out in the context of national urban plans that will provide the policies that will fill the framework described in my first point in this section. These policies will reflect the reality of current distributions of population of where people live and work. They will reflect the importance of all levels of human settlements and will match policies, administrative boundaries and the allocation of competencies of entities to contemporary conditions. In many countries local authority boundaries can only be explained by references to the distribution of power possibly centuries ago and adjustments may be needed. Where prescriptive standards are thought necessary national standards could be related to quantitative criteria such as population thresholds for different tiers of subnational government.

Fourth, effective multi-level governance requires the participation of an empowered civil society. The national frameworks that have been suggested here are needed to create a platform for productive collaboration and to institutionalize participation and democratic good governance. Boosting civil society participation, emphasising the role of the poor, the excluded and minorities, and deepening and broadening civil society itself, is essential. These should not be optional extras in the crafting of the legal and regulatory framework. The institutional niches that civil society should occupy and the rules of engagement should be made clear. Particular care should be given to specifying the role of civil society in ensuring accountability. All of these will be a particular challenge at the metropolitan level where the successful pursuit of participation is at its most difficult.

The culture of collaboration and integration does not happen by chance. Systemic capacity building of national and sub-national governments and civil society to carry out their governance roles should be part of any institutional development strategy to create multi-level governance. This

is particularly important in areas where civil society is not accustomed to playing an important role, and in boosting the role of women, youth and marginalized groups in particular.

Fifthly, metropolitan and regional governance will be a particular area of focus in multi-level governance. This is the level that requires the greatest degree of innovation and adaptiveness, given the critical but also delicate roles that these entities will have to play in institutional innovation. Local authorities, jealous of their perquisites, will always be apprehensive of the regions and metropolitan areas and will not wish to be dictated to. Regions and metropolitan areas will to have to behave in a way that will not antagonize what should be their closest allies. The example of the Greater London Authority is one case in point. Its remit is primarily to encourage economic competiveness and social cohesion and not just service delivery, although it has a critical role in a major sector such as transport. It relies on the London boroughs to do much of the implementation and therefore has to retain their confidence. It does this by consulting, not imposing and exercising a pragmatic responsiveness. It concentrates on planning, coordinating and integration. It therefore has a light structure of only six hundred employees.

ROLE OF PLANNING IN PROMOTING INSTITUTIONAL DEVELOPMENT

Planning is not just a beneficiary of the measures described above; it also provides the one of the most important drivers by which multi-level governance can be executed. National plans, as described above, can provide the framework for collaboration and integration between the tiers with the aim of promoting more balanced regional development. The existence of such plans provides an incentive for collaboration between subnational entities and the integration of sectoral plans produced by ministries and development agencies. Although cooperation can never be guaranteed and conflict is almost inevitable, integrated planning is a zero plus game from which everyone has the possibility of benefiting.

Planning is the only discipline that can undertake the role of guiding the development of these plans. But planning has other possibilities. As repeatedly mentioned earlier that the new order of multi-level governance has integration as its watchword, thus being what is required to overcome the discontinuities and wasteful competition common to current setups. Although the weakness of historical planning has been its concern with comprehensiveness, formality and legalistic landuse control, it also has in its genetic makeup a body of methods, values and principles that can facilitate integration between social, economic and environmental considerations in the way that no other discipline can. It can relate need to programme design and implementation, integrate across sectors, relate the strategic to the immediate, and lead to tangible products such as location specific investment plans (buildings and infrastructure) in ways that other disciplines cannot (Adriana, 2003). One weakness has often been that it is used to control development rather than facilitate it so that it happens efficiently and effectively. As a result it has been isolated from budgeting, including infrastructure budgeting. This needs to be remedied. But some recent incarnations of strategic planning have enabled to live up to its promise as a positive, integrative tool that can marshal the contributions of other disciplines.

However, planning has to continue to transform itself in order to take advantage of these opportunities. Planning by prescription will not work, or if it does, only in highly circumsubscribed settings such as in autonomous development corporations. Rather, the planning profession's input is as one of many, but more in the role of integrator rather than as leader or decision-maker. It has to value non-technical knowledge and see the involvement of the community in planning and decision-making as an indispensible component rather than as an optional extra.

CONCLUSION

Institutional change is both organizational and cultural. The global default system based on hierarchy and authority needs to be replaced by networks, integration between levels and consensus building. Participation by civil society is essential. Planning is by turns progenitor, victim and driver of change. Transformed attitudes by governments at all levels, including national government, is key and Habitat III at Quito (Habitat III, 2016) needs to press the reset button to establish the new order of institutional relationships.
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PROVINCIAL LOCAL GOVERNMENT SYSTEMS OF PAKISTAN;
A COMPARATIVE PERSPECTIVE

Sumrin Kalia*

ABSTRACT

An empowered, accountable and efficient local government that is capable of addressing the needs of people and promoting democratic participation is an imperative for appropriate allocation of resources and improved delivery of services. Pakistan's experience of local government is unique, as all the local government reforms carried out in its history have been initiated by the non-representative military regimes. The democratic regimes have undermined those reforms and have largely unwelcomed autonomous local governments. A glance at history shows that no local government plans have been implemented by democratic governments resulting in the concentration of decision making remaining with the center. The Eighteenth Amendment passed in 2010 by a democratic regime can thus be considered as an achievement towards devolution, as it not only empowered the provinces, but also made it obligatory for the provinces to further devolve power to local government institutions. The provinces now have greater legislative and functional responsibilities. This paper is a study of the historical evolution of the local government system in Pakistan and provides a critical analysis and a comparative perspective of the structure, composition, authority and powers of provincial government.

Keywords: Local government, Structural Setup, Pakistan

INTRODUCTION

Local Government

The local government in Pakistan has the following official definition:

> Local Government: Each province shall, by law, establish a local government system and devolve political, administrative and financial responsibility and authority to the elected representatives of the local governments.

Elections to the local governments shall be held by the Election Commission of Pakistan. This was emphasized earlier in the Constitution under Article 32.

Promotion of Local Government Institutions

The state shall encourage local government institutions composed of elected representatives of the areas concerned, and in such institutions special representation will be given to peasants, workers and women.

Each province has the discretion to devise its own local government system, and the responsibility of holding local government elections. This legislation suffered much delays and delusions in all provinces. The erstwhile Local Government Ordinance (LGO) of 2001 was abandoned in 2010 and the authority was transferred from elected representatives to bureaucrats. Balochistan was the first province to devise its Local Government Act which was passed in May 2010. The other three provinces finally passed their Local Government Acts in 2013. Balochistan held local government elections on 7th December 2013, while no elections have yet been held in other three provinces.

This is the first time in the history of Pakistan that local government system has not been devised from the center; consequently, the system is not uniform across the country. The extent of authority, functions, and fiscal discretions conferred to the local government varies in each province. It must be remembered that good local governance is not just about providing a range of local services, but also about achieving true participatory liberal democracy that encourages civic dialogue, supports sustainable local development and facilitates outcomes that enrich the quality of lives of the people (Anwar, 2006). Whether or not the enacted systems are capable of achieving these notions of good local governance is yet to be seen.

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This study begins with a brief review of the previously enacted local government systems in Pakistan. It then analyses the structure, composition, authority and fiscal powers of the four local government acts in a comparative perspective. A structural breakdown of all the tiers is presented, followed by an analysis of the powers and authorities vested, and the range of functions and responsibilities given to the local government.

HISTORICAL EXPERIENCE OF LOCAL GOVERNMENT IN PAKISTAN

The Indian Sub-continent has had the local government system since the time of the kings and monarchs. The British government formally introduced the system of local government in the mid, 19th century. Through this system the British attempted to co-opt the local elite, however these institutions were never truly empowered, as the Deputy Commissioner; a district level agent of the non-representative central bureaucracy, was the principle actor at the local level. An important feature of the British system of administration and local government was the creation of a rural-urban divide. Urban local councils were established by the British to provide essential municipal services in urban areas. In contrast, rural councils were explicitly used to homologize the local elite through a selective but extensive system of patronage (Siddiqui, 1992).

After independence Pakistan inherited local body institutions from the British which were autonomous in certain respects but substantially under the control of the provincial governments through district officers. The status of the system remained elusive for a long period of eleven years due to lack of political consensus on the constitution. The priorities of the governments in that period remained divergent and the provincial governments had complete control over the matters of municipal government. The budget of the municipal committees was required to be approved by the divisional commissioners and the local authorities were left entirely at the whims of district administration, thus rendering unprecedented control to the bureaucracy.

This state of affairs continued to prevail and no remarkable progress was made until the military government led by General Ayub Khan experimented with local government with the Basic Democracies Order in 1959.

Basic Democracies Order (1959)

In 1958, General Ayub Khan imposed Martial Law and installed The Basic Democracies Order which was the only

representative tier of the government. It comprised of a hierarchical system of four linked tiers. The lowest tier was the Union Councils in the rural area and Union committees in urban areas, comprising of directly elected members who in turn elected a chairman amongst themselves. The higher tiers of local government had some members elected indirectly by these directly elected members and some official members nominated by the government as chairmen. Although the system assigned several functions ranging from social welfare to health and infrastructure, especially at the lowest tiers and at the district level, few functions could be performed due to a severely curtailed fiscal capacity. The Deputy Commissioner was the controlling authority for Union Council and Tehsil Council and the Commissioner for District Council. The controlling authority had vast powers to quash the proceedings, suspend resolutions passed or orders made by any local body. The bureaucracy was given extraordinary powers to determine the policy direction of the local bodies. The Basic Demands System was used as a contrivance to legitimize the Rule of the Military and the President's office (Gauhar, 1996). The 1962 Constitution explicitly linked the Office of the President to the newly created local bodies by declaring the 80,000 basic democrats as the electoral college for the election of the president and national and provincial assemblies. The political role assigned to the Basic Democracies System and the complete bureaucratic control on its operations rendered it controversial and ineffective.

Local Government Ordinance 1979

The 1970's saw the return to democracy and resulted in unanimous approval of the Constitution of 1973. Despite the fact that the constitution established promotion of local institutions as 'principles of policy' envisioned under Article 32, the two local government legislations which were passed during Bhutto's administration People's Local Government Ordinance 1972 and the People's Local Government Act 1975 were never implemented. These legislations abolished the direct representation of the bureaucracy in local governments as members and chairmen, and instead provided for direct representation of all members (including chairman) of all tiers of local government through direct elections.

In 1979 the Zia Regime promulgated the Local Government Ordinance. The Ordinance resembled Ayub's legislation in some respects, as it continued with the rural-urban divide and the local bodies continued to lack constitutional protection. This ordinance created four levels of municipal government in the urban areas: town committees, municipal committees, municipal corporations and metropolitan

corporations. In the rural areas the system provided three tier system: Union Councils, Tehsil or Taluka Councils and District Councils. General Zia consciously adopted the provision that the members of each council elect their chairman/ heads and the controlling authority remained the elected house, thus weakening the role of bureaucracy in local governance. Although, the provincial administration retained suspension powers and the powers to quash resolutions and proceedings during the Zia period, nonetheless, their control over local government functioning through direct representation was weakened. Local councils had considerable power to launch schemes, review and implement development programs, and perform functions of other government departments. Councilors with necessary qualifications were appointed ex-officio Justices of Peace.

Divisional and District Co-ordination Committees comprising of local government members were formed to co-ordinate the activities of local bodies, departments and the provincial government. They prepared and approved development schemes under the ADP (Annual Development Program). The members of these committees were elected from *Taluka* and District Councils in case of rural areas and from Town and Municipal Committees and Corporations in case of urban areas.

For revenue generation the local councils mainly depended upon their taxes, commercial projects and government grants. Various types of taxes, rates, tolls and fees which were to be levied by the local bodies were specified. There were certain taxes which the concerned provincial governments shared with the local councils, for instance property tax, betterment tax, fines and penalties levied on municipal offences, proceeds from auctions of mines and minerals and fishing rights. Besides, the provincial governments also gave grant-in-aid to the local councils.

Local Government Ordinance 2001

The period between 1985 to 1999 saw the revival of elected provincial and federal assemblies resulting in enhanced domination of provinces on local institutions. Many factors led to the suspension of the local bodies between 1993 and 1998. In 1999 General Pervez Musharraf, took over the country by replacing an elected government. In 2001 Local Government Ordinance, also called the 'Devolution of Power Plan' was promulgated. This plan was significantly different from the earlier plans as it devolved administrative and expenditures responsibilities to the local governments and empowered them with decision making across all levels. It abolished the urban-rural divide and established a three-tier

system. The lowest tier was the Union Council which had directly elected members. The middle tier of Tehsil Council comprised of the directly elected *naib nazims* (deputy governor) of each union council in the *tehsil*. The top most tier was the District Council which had all the nazims of Union Councils in the district as members. This system linked all the tiers politically. These councils supervised the three categories of local government; district governments, *tehsil*/ town municipal administration and union administrations. A large bulk of public services were delegated to the district government.

Almost all provincial government departments were devolved to the district level with the exception of departments of police, higher education, irrigation and power. The head of the district administration deputy commissioner who reported to the provincial bureaucracy was replaced by the District Coordination Officer (DCO) who reported to the District *Nazim*. Similarly, the District Police Officer (DPO) also reported to the District Nazim. These two factors enhanced the authority of District *Nazim*. The staff of the district including the DCO however, continued to remain provincial government employee, which limited the District Council's authority to appoint, promote, transfer or discipline these employees. Postings/ transfers of members of district cadres was an important source of mustering and exercising political influence (Mezerra, Aftab, et. al., 2001).

A Provincial Finance Commission (PFC) was established for rule-based transfer of funds to the local governments. A major bulk of these funds was used for salaries of the staff which were determined by the federal government. The *Nazim* had the power to devise the budget of the districts, however, he had no influence on the allocation of PFC awards. The districts could also raise their own revenues through certain taxes, however these were meager making them excessively reliant on provincial and ultimately federal funds.

Another caveat in this system proved to be the non-party based elections which invariably ended up weakening political linkages between elected provincial governments and the local governments. This resulted in conflicting interests, rise of non-committed agents, changing loyalties and a lack of political ownership of the system.

The Provincial Local Government Commissions were constituted to oversee the performance of the local government through reviews. It could also organize consultative meetings between national and provincial legislators and the elected representatives of the local government, to discuss Annual Development Plans (Local Government Ordinance, 2001).

The LG system provided for several conflict resolution mechanisms such as the *Zila Mohtasib, Zila Mushavirat* Committee and *Muslihat Anjumans*. Finally grass, root community participation for small scale development was encouraged through Citizen Community Boards.

The system had limited constitutional support hence was largely abandoned in 2010, transferring administrative authority to provincial bureaucracy. The 18th amendment empowered the provinces to devise their own local government however, the system remained in a quandary until the acts were finally passed in all the four provinces after much deliberation and perplexity.

STRUCTURAL COMPARISON

The Local Government Acts promulgated by the provinces of Sindh, Balochistan and Punjab closely resemble Local Government Ordinance 1979 in their structural composition. The urban-rural divide has been brought back with the Union Council and District Council forming the two tiers in rural areas and Municipal Committees, Municipal Corporations and Metropolitan Corporations as levels in urban areas based on population size. These bodies are responsible for provision, maintenance, management and improvement of the services assigned to them. The offices of the government have been retained under the purview of the provincial governments, and the local elected bodies have the responsibility to improve and supervise the functions of the line departments.

Contrastingly, Khyber Pakhtunkhwa (KP) Local Government Act (LG Act) is heavily inspired by the LGO 2001, where a district government as a separate tier of the government has been developed. The KP Act fully devolves offices of the government to the district government giving it financial and administrative authority. It consists of a District Council and District Administration. The elected district council is responsible for the control, operation and management of the devolved offices. The KP LG Act has identified twenty-five districts in the province. These districts are further divided in tehsils where Tehsil Councils will be elected. The Village Councils and Neighborhood Councils have been formed to distinguish areas with urban and rural characteristics respectively however, there is no distinction in their functions and authorities. All the Local Bodies in KP will be elected directly (Figure 1).

While the Acts of Punjab, Sindh and Balochistan are similar in their overall composition, some difference can be noted in their design. Punjab separates the functions of health and education and creates separate District Health and Education
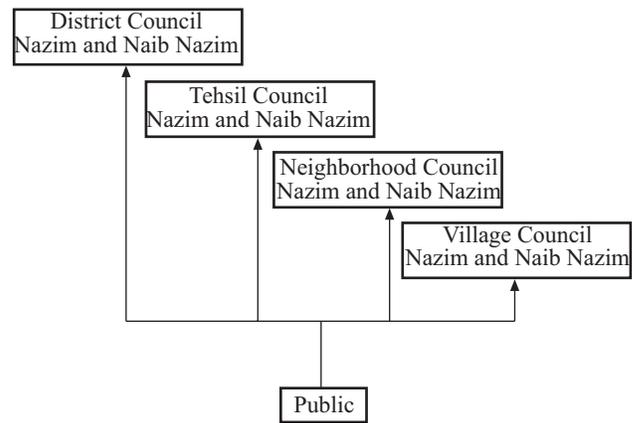
Figure-1: KPK Local Government Act 2013, Structural Breakdown.
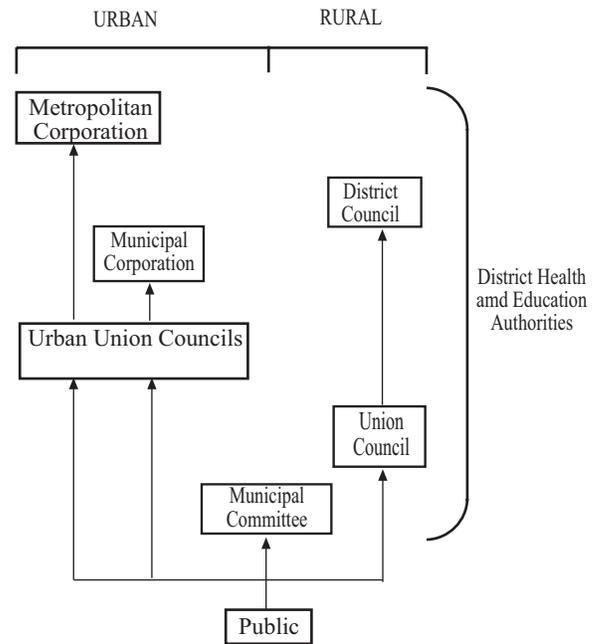
Figure-2: Punjab Local Government Act 2013, Structural Breakdown.

Authorities. These authorities will have members from the local government in the district who will be elected by their respective local bodies and technocrat members who will be appointed by the Government of Punjab. The Chairman, Vice Chairman, and the Chief Executive Officer of each shall also be appointed by the Government of Punjab. The Chief Executive Officer will be appointed through open competition and will act as a principal accounting officer (Figure 2).

In Sindh a new tier of union committees has been added,
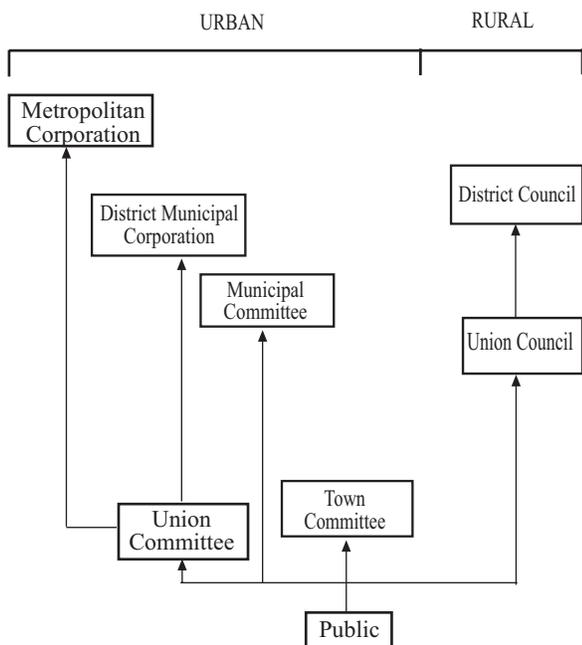
Figure-3: Sindh Local Government Act 2013 Structural Breakdown.

Figure-4: Balochistan Local Government Act 2010, Structural Breakdown.

the Metropolitan and Municipal Corporations will have Union Committees as the lowest tier. The members of Union Committees, Town Committees and Municipal Committees in urban Sindh and of Union Councils in rural Sindh will be directly elected (Figure 3).

Balochistan has directly elected Union and District Councils in rural areas. Metropolitan, Municipal Corporations and Municipal Committees exist in urban areas according to size of population and the members are directly elected (Figure 4).

Local Representation

The representation through local elections is an important element of local governance as it provides opportunities for people to have a say on issues that might affect them within their local community. The Acts show considerable variations in the way local bodies are elected. The population covered by the lowest tier of local government is also considerably different in each province. The only electoral similarity that exists is the stipulation that all four provinces will have elections on party-basis. Table 1 shows a comparison of electoral representation at local governments in the provinces.

FUNCTIONAL DEVOLUTION

Delegation of functions is also very different in each province. The Local Government Act of Sindh and Balochistan retains the divide of optional and compulsory list of functions as in the LGO 1979, whereas Punjab separates the functions of health and education from the main local councils. KP devolves almost all functions to the district government. The KPLG Act stipulates that the coordination, human resource management, planning, development, finance and budgeting functions of all the devolved offices are the responsibility of the local government.

Table-1: Electoral Representation

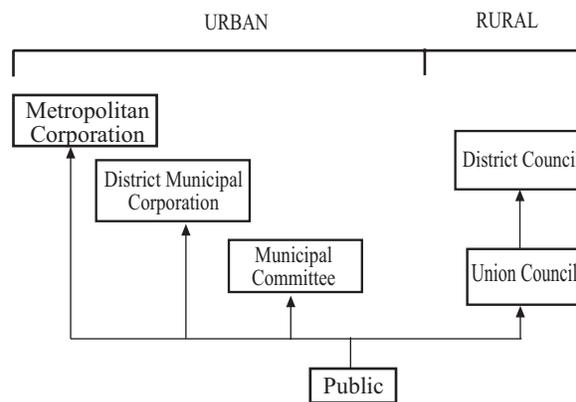|	**Population that the lowest tier shall cover**	**Elections**	**Term Limit**
KP	Village and Neighborhood Councils 2,000-10,000	Direct Elections at all Levels	3
Balochistan	Union |Councils 1000-1,500	Direct Elections at all Levels	4
Punjab	Urban Union Council - Above 20,000 Rural Union Council - Above 10,000	Direct Elections at lowest tiers	5
Sindh	Union Committee 10,000-50,000	Direct Elections at lowest tiers	4

ADMINISTRATIVE AUTHORITY

The devolution of administrative authority, which is an integral prerequisite of the Article 140A, has been restrained in most cases with varying degrees of delegated power.

KP gives complete discretionary power to the elected *nazimeen* to undertake administrative decisions concerning devolved offices and to initiate inspections of the *Tehsil* Municipal Administration, Village Councils and Neighborhood Councils in the district through Standing Committees. The village and neighborhood councils have been authorized to supervise and monitor the performance of functionaries of the government offices.

Sindh gives the elected Mayor the power to exercise supervision over the acts and proceedings of all servants of the council (Sindh Local Government Act, 2013), however the Act does not clarify their control over government offices. The chief executives (municipal commissioners and the officers) shall be under direct control of the Mayor or the Chairman. However, this power is stifled by the provision that the provincial government has broad powers to supervise and inspect the local councils. The chief executives of the councils are required to submit a copy of every resolution passed in the council to the provincial government. An important modification made by the Sindh Act is that local councils can make recommendations in certain cases and if the government does not accept those, it is obliged to give reasons.

The Balochistan Act explicitly states that the business of local councils to be conducted in manner as prescribed by the government. The provincial government in Balochistan is also entitled to conduct broad inspections of the local councils and a government appointed inspecting officer has been given power to issue directions and advice to the Local Council if necessary. All development plans initiated by the local councils require approval from the provincial government. Even in routine discharge of functions the local councils are required to issue periodical reports to the government and follow its directions.

Punjab goes far enough to empower the Chief Officer to oversee the conduct of the Local Government and to make sure it works under the framework of the provincial government in the prescribed manner. In Punjab provincial bureaucracy has been given considerable powers as the Chief Officer has been entrusted with the charge of principal accounting officer. The Act gives wide powers to the provincial government as it may issue directions to a local

government which will be binding in nature. In the case of health and district authorities the government retains the power to appoint the Chairman, Vice Chairman and Chief Executive Officer. These authorities have been delegated the functions of maintenance, supervision and development of educational and health care institutions. As regards the composition and even the functions of these authorities there prevails confusion the provincial government has made this all ambiguous and kept unregulated powers with it. It would be correc to say that the provincial government has centralized the functioning of the sectors of education and health.

The Acts also vary considerably in matters regarding execution of functions and supervision of the administration. The KP Act specifies the powers and conduct of District Councils, such as electing a Standing Committee for each office to oversee service delivery. Regarding the service matters of the employees KP continues with the Local Council Boards initially established under the 2012 Act, but ensures that service structures of local council services will be devised by the government of KP within a year.

Sindh constitutes the Local Government Board, however the functions and even the membership of the board has not been specified. The Act also provides for Divisional and District Local Boards, if required, however their role also seems unclear. In Karachi, the situation is slightly different as the service board constituted by provincial government will have representation of the District Municipal Corporation.

In Balochistan, the Balochistan Local Government Board retains the power to deal with service matters of employees of local government.

In Punjab the power to make appointments, order transfers, take disciplinary action and deal with other service matters has been fully retained by the Punjab Local Government Board. The members of this board shall be appointed by the provincial government. This leaves little room for elected members to exercise supervisory control.

INTER-GOVERNMENTAL RELATIONS

It is also interesting to note that all the provinces have retained varying degrees of authority to oversee the conduct of local governments. The local government commissions in KP, Punjab and Sindh are authorized to conduct inspections and audits of the local governments. They are responsible to the provincial government and recommend necessary actions to be taken. The decisions of the commission are binding to the local councils. A similar function is carried

on by the inspecting officer in Baluchistan. Sindh and Punjab require the commission to hold consultative meetings of national and provincial legislators, the Mayors and the Chairmen on a periodic basis to sanction and review development schemes and provide facilitation to decentralized provincial departments.

In Baluchistan every division has a Divisional Coordination Committee, to coordinate the matters of the local councils. The members of this committee are the elected mayors and chairmen of all local bodies in the district; heads of departments of both provincial and federal government and the Collector of the district. It has representation from the reserved seats and is head by the commissioner. This committee has the power to scrutinize and sanction the budget of the local bodies, and make decisions regarding the taxation authority of the local councils. This committee is also authorized to resolve any conflicts among the departments and councils.

The chief ministers in all the provinces have the power to dismiss a local government or head of council and appoint office holders after the dismissal of council heads. In Punjab, the government can suspend local government officials for ninety days, in Sindh for six months, and in Khyber Pakhtunkhwa and Balochistan for thirty days. During and after this period the dismissed officials can file review petitions to the provincial governments.

FISCAL DEVOLUTION

The revenue sources of the local governments are the amounts raised through taxes, fines, tolls, etc. and has its share in Provincial Consolidated Fund (PCF) which is disbursed as grants from the provinces including the grants in lieu of Octroi and Zila Tax. PCF's in Punjab, Sindh and KP have been established to disburse funds to the local governments through a formula-based transfer mechanism. In Balochistan

a similar function is performed by the Local Councils Grants Committee. The taxes levied by the local governments are almost the same in all provinces, some of which are conservancy charges, parking fees, license and permits.

The KPLG Act assures that in addition to the agreed funds the development funds that shall be disbursed to local government will not be less than thirty percent of the total development budget of province in the respective year. There is no such guarantee in rest of the three provinces. It also emphasizes the need to consider the revenue bases of the local councils and the reach and quality of services while deciding fiscal transfers. Punjab and Sindh consider principles of population, backwardness, need and performance of a council while Balochistan emphasizes need, capacity, effort and performance of local councils while making recommendations for fiscal transfers.

The taxing powers in all the provinces are limited and it can be seen that expenditure decentralization is majorly dependent on the provincial finance commission awards. The local governments are given straitjacket mandates with few resources, and kept under tight provincial reign.

CONCLUSIONS

Below are a few observations relevant to the Acts of all provinces.

• Party based elections of the local government will help create political linkages between the tiers of the government and reduce frictions. It will give mainstream political parties a stake in supporting local democracy. The efficacy of this can be best harnessed if the political parties select local electoral candidates on the basis of merit and a good reputation of public service rather than loyalties and patronage. This will support grass root democracy and remove barriers to entry in politics.

Table-2: Various commissions and boards constituted in LGAs of the provinces.

	Punjab	**Sindh**	**Balochistan**	**KP**
Disbursement of Funds	Punjab Financial Commission	Provincial Finance Commission	Local Councils Grants Committee	Provincial Finance Commission
Administrative Services	Punjab Local Government Board	Sindh Local Government Board	Baluchistan Local Government Board	Local Service Board
Inter Governmental Matters	Local Governement Commission	Local Government Commission	Divisional Corrdination	Local Government Commission

Table-3: A comparison of finance related issues of the local governments in all provinces.

	Punjab	Sindh	Balochistan	KPK
Representation of Local Government in the Provincial Finance Commission/ Local Grants Committee	No representation	One Mayor Metropolitan Corporation One Mayor of Corporation One Chairman Muncipal Committee One Chairman District Council	No Representation	Two *Nazimeen* District Council Elected by *Nazimeen* of all District Councils Two Nazim *Tehsil* Elected by *Nazimeen* of all *Tehsil* Councils
Audit	Auditor General of Pakistan	To be audited by an authority as prescribed by Provincial Government	Director Local Fund Audit	Internal Auditor and Auditor General of Pakistan
Budget	Prepared and Sanctioned by Local Bodies	Prepared and Sanctioned by Local Bodies	Prepared by the Local bodies and sanctioned by Divisional Coordination Committee	Prepared and Sanctioned by Local Bodies

• The suspension powers given to the provincial governments can be a credible threat over the local politicians. Additionally, local representatives have limited authority over the matters of bureaucracy which remains under the purview of provincial secretariat. This can result in unchartered, and conflictual relationship between the local heads and the bureaucracy, which was evidenced in the LGO 2001. This has the potential to limit the role of the local government and thereby reduce efficiency of public services.

• The Local Government Acts treat large metropolitan areas like Karachi (23 million people with large and dynamic tax base) and Lahore as typical local governments with limited authority. Moreover, some metropolitan functions have been retained by the provincial governments. Karachi Water and Sewerage Board (KWSB) and the Sindh Building Control Authority (SBCA) remain subject to the authority of provincial minister for local government. Similarly, in Punjab, Lahore Development Authority (LDA), Parks and Horticulture Authority (PHA), solid waste management remain beyond local government control. This can restrain metropolitan growth and deprive the residents from gaining a share in economic development. Literature on fiscal federalism suggests that large metropolitan areas should have autonomous two-tier regional governments with powers equivalent to that of a province and direct interface with the center (Shah and Shah, 2006).

• The Acts entirely ignore the need for public participation in community development. An ideal decentralized system provides consistent level and combination of public services, facilitates partnerships of various non-state stakeholders with public agencies and develops networks that can improve social and economic outcomes. Local governments should possess mechanisms for citizen involvement in local decision making.

• Powers to impose taxes are restricted as per the local government Acts of all provinces. Local governments are not allowed to incur debt in all the Acts. Local governments are excessively reliant on provincial allocation through the distribution of the Provincial Finance Commission Award. Institutionalizing effective local democracy will require giving local governments control over the planning and provision of all local public goods and services, control over its administrative staff and rights to predictable and effective finances.

Conclusively, globalization and information revolution are changing the roles of various levels of government. Most responsibilities are being shifted to the local governments and the role of provinces is greatly reduced. An obvious justification to this tendency is the fact that local governments are closer to the people and hence more responsive. An ideal decentralized system ensures a level and combination of public services consistent with voters' preferences while providing incentives for the efficient provision of such services.

Pakistan's experience with local government has remained tainted as military regimes have used the system to legitimize their control. Consequently, the mainstream political parties viewed non-partisan local governments as a class of collaborative politicians who could be possible competitors for power and patronage. This explains why civilian governments have never revived local government systems and have replaced them with non-elected administrators. In 2008 the civilian democratic rule returned, however the incumbent political parties despite spending a full term in office did not hold local government elections. In 2013 the country saw its first ever transition from one civilian government to another. The year saw another milestone as the local government legislations were passed which gave political ownership to the system.

Despite some recognizable achievements the analysis of the Acts reveals that the Local Government Acts are largely differential to the provincial governments rendering them powers to regulate functions of local governments, determining resource distribution and suspending them without any independent judicial reviews. The supremacy of the provinces as envisioned in the Acts, can offset local democracy and taint the quality of public services. This can be endorsed by Pakistan's Human Development Index which rose by 18.9 percent between 2000-2007, an era when LGO 2001 was in effect. This corresponded to an annual average of 2.7 percent. From 2007 to 2012 it only went up by 3.4 percent, just under 0.7 percent per annum. The LGO 2001 was discontinued in 2010 and during the last six years without any effectual local government system the HDI increases crashed down as low as 0.59% a negligible average annual increase of under 0.20 percent.

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INSTITUTIONAL POLICY REFORMS FOR URBAN LAND USE PLANNING: MIXED USE OF LAND IN BIG CITIES OF PAKISTAN AND ITS IMPACT ON REDUCTION IN COMMUTING AND CONGESTION COST ON ROAD

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Zahid Asghar**

ABSTRACT

This study seeks to emphasize the institutional policy reforms for the mixed use of urban land planning for commercial and residential purposes because land use planning is directly related to transportation and environmental problem. In this study the mixed use of urban land for commercial and residential purpose in the large cities of Pakistan has been measured by using the indices of measurement for mixed use of land. The data collected by Urban Unit of Pakistan and some previous research done for the big cities of Pakistan for measuring mixed use of land is used for this study. To analyze the impact of mixed use of urban land for commercial and residential purpose on reduction in commuting and congestion cost, the current level of mix-use land by using data for main cities of Pakistan, has been analyzed. Lahore is on top of mix-land use index while Rahim Yar Khan is at the bottom. To test the hypothesis, whether mixed use of urban land leads to significant reduction in commuting and congestion cost, a survey was conducted from the two markets in the same area of Islamabad. One market by construction and design had features of mix-use land while the other had commercial use. The exploratory data analysis and non-parametric analysis of survey indicated that there was significant reduction in commuting and congestion cost due to mixed use of urban land for commercial and residential purpose. So, the conclusions suggest that there is a great need for institutional reforms regarding mixed use planning in the big cities.

Keywords: Mixed use of land, smart cities, institutional reforms, Lahore, congestion

INTRODUCTION

Pakistan is facing serious problem of urban land scarcity due to rapid urbanization as there is large number of rural-urban migrants and inefficient urban land use. At least 40% of the population of Pakistan is living in cities and it is estimated that this ratio will reach up to one half in 2030. Urban population in Pakistan is 63.1 million and it is estimated to go up to 110 million in 2030. Some other studies (Raza, 2013) even state that currently the urban population of Pakistan is more than 60%. Although land area remains the same but the population of cities increases because of urban-rural migration as well as population growth. Therefore, judicious land use and institutional policy reforms for land use planning are important aspects and there is a great need for use of efficient urban land. The consequences of inefficient land use in the big cities are traffic congestion, high commuting cost, pollution and other hazards.

Now a days mixed-use of land (MUL) (a concept in which the same land is used for residential and commercial purpose) is a key component of urban planning both in developed and developing countries, as cities are growing very rapidly. This is considered as the way forward for new urbanism and compact cities, but this concept is not new as one looks at the past when there were no automobiles and people walked to schools and offices. There howerver, a difference between historic application and modern mixed-use of land. Historic all mixed-use development evolved gradually with time without any planning due to absence of automobiles. Modern mixed-use development has developed in a short period of time with proper planning (Ong and Hess, 2001) .

There are also two ways in which designers can use mixed land use. First is to plan mixed use vertically like it was done in Singapore and Hong Kong in Mei Fu Sun Chuen development; and secondly to use the urban land mix horizontally, like in U.S.A, Canada and other European countries (Ganeson, et. al., 2005). It is also an important

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component of the smart growth policies which can lead to more sustainable urban development (Choi, 2008). Furthermore, urban planners suggest mixed-use development to gain access to greater densities and its benefits, and overcome health, environmental and commuting cost issues (Herndon, 1965). This awareness about the efficiency of urban land use is increasing day by day and city planners are also thinking about this concept to optimize the use of urban land and cost solutions.

There are several indices which have been used previously for measuring mixed use of land and market concentration. Initially Atkinson index was used to measure the income inequality and market concentration (Atkinson, 1970). Later on many indices were introduced based on the criteria of percent/proportion, like Balance Index, Herfindhal-Hirschman Index, Entropy Index, Cluster Index, Dissimilarity Index, Exposure Index, and Gini Index. All these measures are different in the sense that some of them measure proportions and some measure percentages of the landuse for the commercial and residential purposes. Some of the measures are integral measures and some are divisional measures. In that sense all these measures differ from each other (Song, et. al., 2013). The Herfindhal-Hirschman Index has been used to measure mixed-use of land in this paper.

The significance of introducing the concept of mixed-use of land is to reduce traffic congestion, distance between work and job place, automobile dependency and carbon emissions caused by heavy traffic (Herndon, 1965). This study debates efficient land use patterns, viable traffic solutions, low population and other related issues. When cities are built without mixed use of land, two parallel cities need to be built at a time, one part of the city only contains commercial area and offices, while the other part of the city contains residential areas. The current rate of urbanization in Pakistan is 3 percent and if people are unable to make cities sustainable in next few decades, citizens will face enormous problems of congestion, pollution and chronic health issues. Henlls professionals need to plan cities for sustainable development.

The policies of relevant institutes are more focused towards engineering solutions and a gap is seen with regards to urban development. This results into induced demand, when supply increases, consumer demands increase too. So, there are more cars and congestion and commuting problems remain the same. This research is an effort to start a debate on policies to overcome problems of congestion and commuting through efficient land use patterns.

The term "mixed-use" was introduced in the field of urban planning in 1960s and later there was no importance given to this term. When cities faced problems of pollution, congestion and commuting, city planners thought about designing, sustainable cities. In this era there has been a rapid increase in urban population due to high economic growth. This creates problems in cities which also contribute to the revival of mixed-use development.

In the historical perspective there was no motorised transport, and walking was the basic means of mobility. It was the need of time that people built such environment in which there was less distance between residence and work place in towns and cities (Morris, 1994). Furthermore, company towns and model towns developed in the US in 1640s and later in the UK there were Garden cities during 1920s which carefully balanced the distance between industry and residences.

There is vast empirical literature which proves that mixed-use of land can play an important role to overcome the problems of congestion and commuting faced by cities today. With the change in landuse mix from diverse to homogeneous, the probability of owning an auto decreases by 31 percent (Ong and Hess, 2001).

Whereas Litman, (2002) finds out that there is huge cost of automobile dependency in USA. Similarly Miller and Tsang, (2010) finds the relationship between job, housing and commuting. This study shows that in mixed use neighbourhood vehicle miles travelled reduces by 28 percent and travel time reduces by 13.3percent according to the national household transportation survey data for Virginia. In another study of landuse impact on transport use it is shown that mixed use of land reduces vehicle travel and increases the use of alternative modes, mainly walking. Mixed use areas normally have 5-15 percent less vehicle travel (Litman, 2014).

Theoretically and empirically it is suggested that mixed-use of land has significant impact on reduction in congestion and commuting cost. The literature suggests that there should be integrated land use transport policies to avoid the problem of congestion in the cities. Literature also suggests that mixed-use of land is the key component of smart growth and a necessity of cities today.

DATA

Two sets of data is used in the study. One is secondary data which is basically percentage of landuse for the commercial

and residential purpose in big cities of Pakistan. Other set of data is primary data for measuring commuting and congestion cost from two markets located in close proximity in Islamabad. One market by construction and design has features of mixed landuse, while the other is only for commercial use

Secondary Data

The source for the secondary data is from Urban Unit of Pakistan in Lahore (Table 1).

Table-1: Land area use
Source: Urban Unit of Pakistan 2013

Cities name	Residential Area(Square Km)	Commercial Area(Square Km)
Karachi	1851.675	64.191
Lahore	1086.236	62.02
Faisalabad	494	52
Peshawar	653.64	50.28
Rawalpindi	2943.2448	143.7792
Gujranwala	764.6418	108.4122
Islamabad	498.3	45.3
Multan	2077.0622	42.4194
Bahawalpur	126.1904	4.744
Quetta	1496.5573	67.3862
Gujarat	1596	95.76
Sargodha	3161.16	134.642
Jhang	3789.6318	131.2541
Shekhupura	2122.952	53.044
Abbottabad	285.8988	22.2497
Kasur	787.814	35.156
Rahim yar khan	1351.35	142.56
Sahiwal	1002.2331	56.3376
Dera ghazi khan	2548.3	154.6968

In Table 1 the land area uses for commercial and residential purposes in major cities of Pakistan are listed along with the percentages given for commercial and residential purposes.

Survey Data

The primary data used in this study, has been collected via qualitative research and through surveys through designed questionnaire from people living in the buildings having mixed use of land for commercial and residential purposes, and from an area which is not mixed use. The study was conducted on a sample of one hundred and fifty people from both areas. The sampling type, which is used in this study, is stratified sampling. Selected people were shortlisted and questions regarding their choice of living were asked.

Description of Variables

Table 2 lists down the different variables which were used in the analysis.

METHODOLOGY

This study uses two methodologies, one is for measuring mixed use of land by using Herfindhal-Hirschman Index (HHI) and the other is a basic tool of exploratory data analysis for the qualitative data collected. Non-parametric approach is also used for further analysis.

Methodology for Measuring Mixed Use of Land

For the measurement of mixed-use of land the HHI is used. The reason for using this index is that it is least affected index by size and geography of the city. The details of HHI are given below.

Herfindhal-Hirschman Index (HHI):

It is considered as the index of market concentration which is widely used in the field of economics, and using same concept of distance measurement, one can also use this index for the measurement of mixed-use of land.

Mathematical Formulation

Let l^j be the percentage of residential land use in town over the total land of town j and let k be the number of land use types Mathematical formulation of the index is given below:

$$HHI = \sum_{j=1}^{k} (100 * l^j)^2$$

The values range of this index varies from 0 to 10,000 and higher. The value of HHI refers to greater mixed-use of land

Methodology for Measuring Commuting and Congestion Cost

In this study the tools of exploratory data analysis have been used for the descriptive analysis, which are five stats summary for finding the deviation of data from the median and

Table-2: Description of Variables

Variables	Description and Measurements
Travel distance	It is the distance travelled by the people on a daily basis from work place to their residence. The unit of the variable is kilometre.
Travel time	It is the time which people take in travelling from work place to their residence, the unit of the variable is minutes.
Time Delay due Congestion	It is the time delay due to congestion during travel from work place to residence. It is measured by multiplying delay time with the value of time of a person.
Maintenance Cost	The cost people bear of own vehicle in terms of wear and tear. This cost is measured in Pak Rupees. The social cost is not included in it.
Commuting cost	It is cost of travel of the people on a daily basis. It is measured by the cost of travelling from work place to residence. This cost is measured in Pak Rupees.
Congestion cost	The congestion cost is measured by different costs which are time-cost, fuel-cost and maintenance-cost. The unit of variable is measured in Pak Rupees.

dispersion in the data. Non parametric approach and contingency table is used for hypothesis test done on the p-value and chi-square values.

The comparison between variables values has been done in the case of people living in mixed use settlements and people not living in mixed use settlement.

RESULTS

Mixed Use of Land for Commercial and Residential Purpose in Pakistan

In Figure 1 the results show the extent of mixed-use of land in big cities of Pakistan, using the HHI.

From Figure 1 it is observed that the values of HHI varies between 130.830 and 3769.585. Highest value is for Lahore because this city has mixed-use of land and many old developed areas. The lowest value is for Rahim Yar Khan located in northern Punjab which is a major city developed after Independence. It is interesting to note that the HHI shows great diversity of landuse in Pakistan.

Rawalpindi has also some trend of using mixed-use of land and it is not because of recent planning but because of

traditional areas which usually have mixed-use development. This mixed-use development in Rawalpindi has evolved traditionally, thus the value of HHI is much higher as compared to other cities of Pakistan.

If one looks at the HHI of Islamabad it is slightly higher as compared to other cities of Pakistan, because this city is well planned but does not have mixed use development. If one looks at other values of the index it is not encouraging because of segregated developments of commercial and residential areas, particularly in the last three to four decades.

Impact of MUL on Reduction in Commuting and Congestion Cost

Travel Time (Mins)

Figure 2 gives a comparison of daily time consumed by people using mixed use of land (MUL) for residential purpose and those who are not using mixed use of land. The black doted bars show the travel time of people who are not using MUL of land and the other bars show the travel time of people who are using MUL. Most of the people using MUL have travelling time of ten or twenty minutes, but the majority of people not using MUL are travelling thirty to sixty minutes.
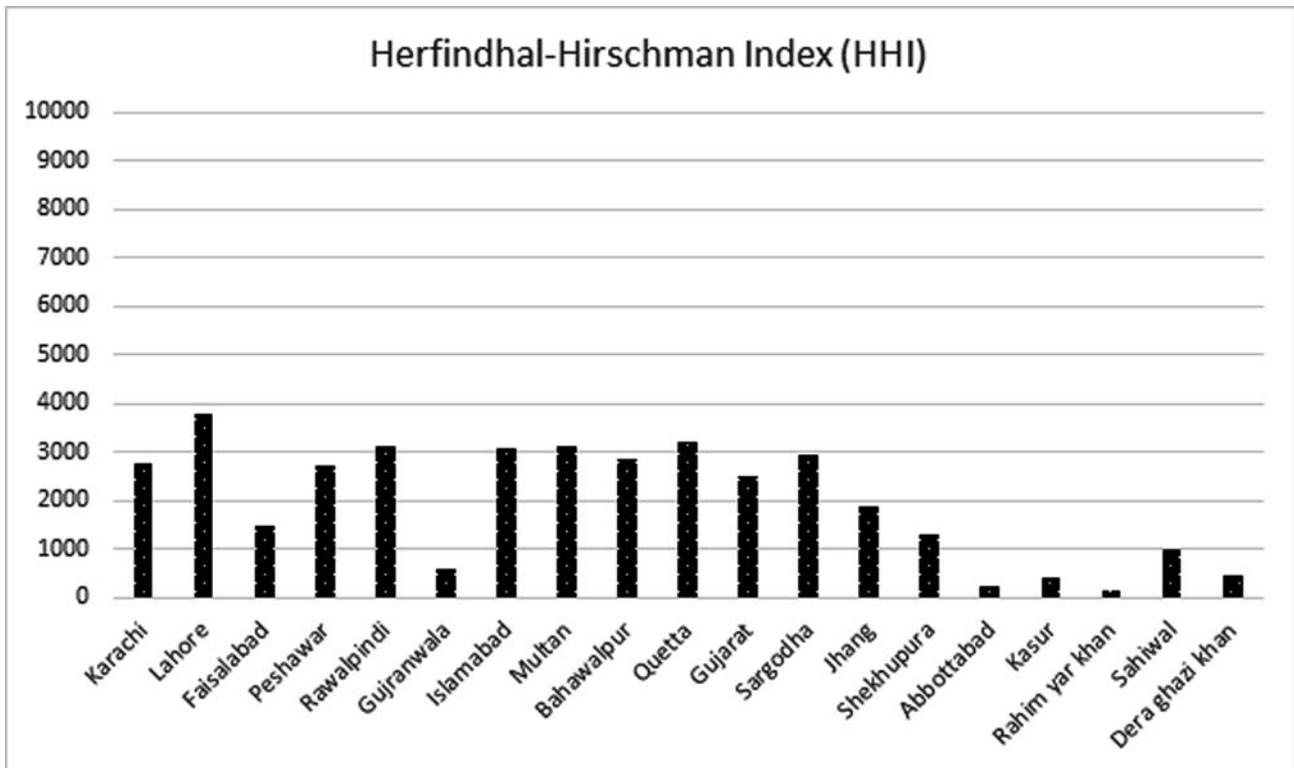

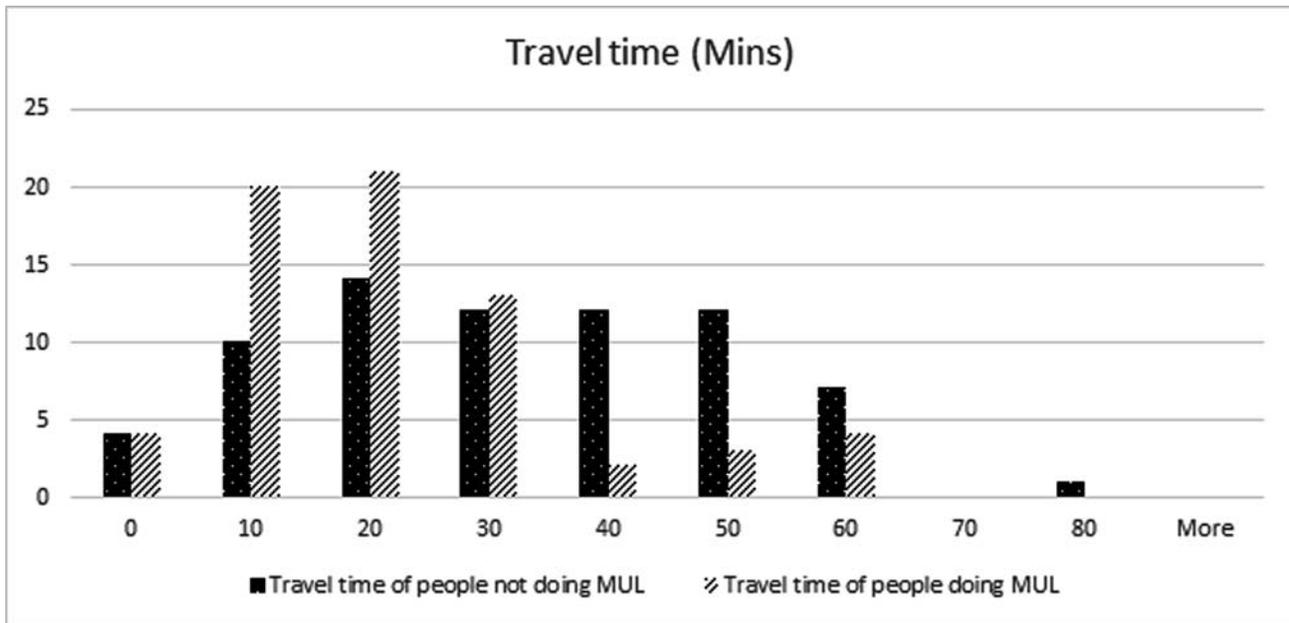*Figure-1:* Graphical presentation of mixed-use of land in big cities.

Figure-2: Graphical presentation of travel time with and without MUL.

Table 3 shows the summary statistics of travel time for both groups of people. It can be seen from the table that the average time consumed by people who are using MUL for travelling is twenty minutes and average time consumed by people who are not using MUL for travelling is twenty three minutes.

Travel Distance

Figure 3 shows the comparison of daily distance travelled by people residing in mixed use areas and others. The blue bars show the travel distance of people who are not using MUL and the red bars show the travel distance of people who are using MUL. It is interesting that as the distance

traveled by people increases, the number of people using MUL decreases.

Table 4 shows the travel distance for both groups of people. From the table it can be seen that the average distance travelled by people who are using mixed use of land is six kilometer per day. Average time consumed by people who are not using MUL for travelling is eleven kilometers.

Commuting Cost

Commuting cost is the cost borne by a person daily for travelling. This has been measured in Pak Rupees for this research. Figure 4 compares the cost of commuting borne

Table-3: Data summary of travel time

	Min	**Mex**	**Q1**	**Median**	**Q3**	**Mean**	**SD**
With MUL	0	60	10	15	27.5	19.64179	14.92339
Without MUL	0	75	10	20	30	22.33333	16.97302

Table-4: Data summary of travel distance

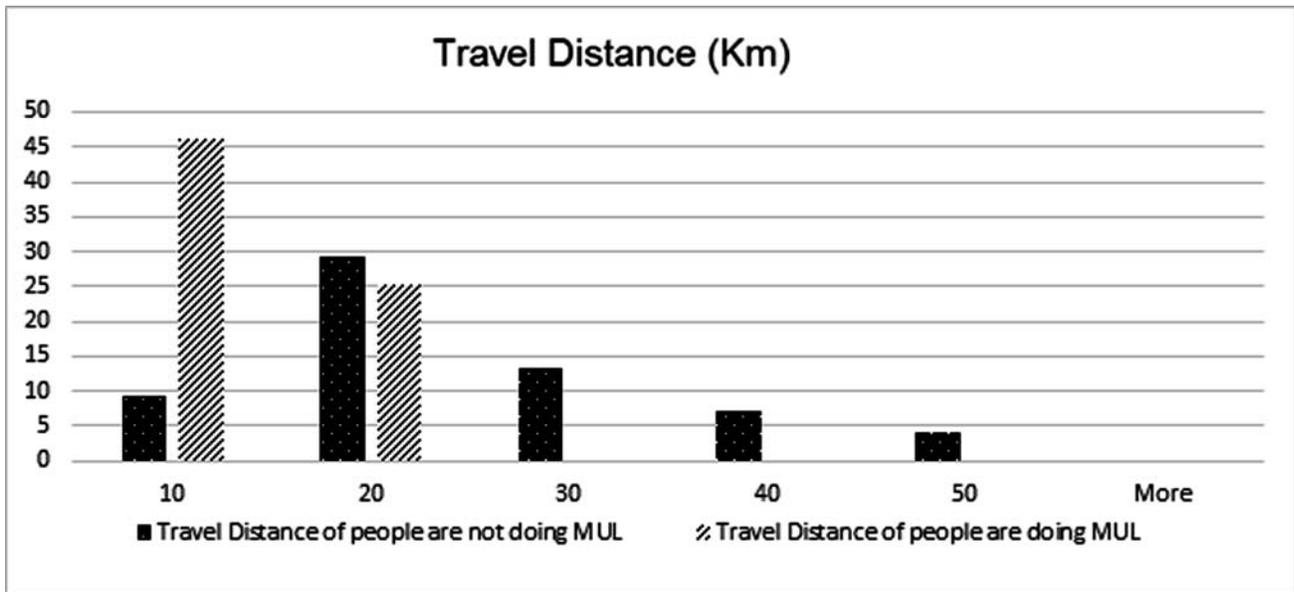|	**Min**	**Mex**	**Q1**	**Median**	**Q3**	**Mean**	**SD**
With MUL	0	20	1	1	12	6.80282	6.1937
Without MUL	3	50	14	15	27	20.7419	11.1354

Figure-3: Graphical presentation of travel distance with and without MUL.
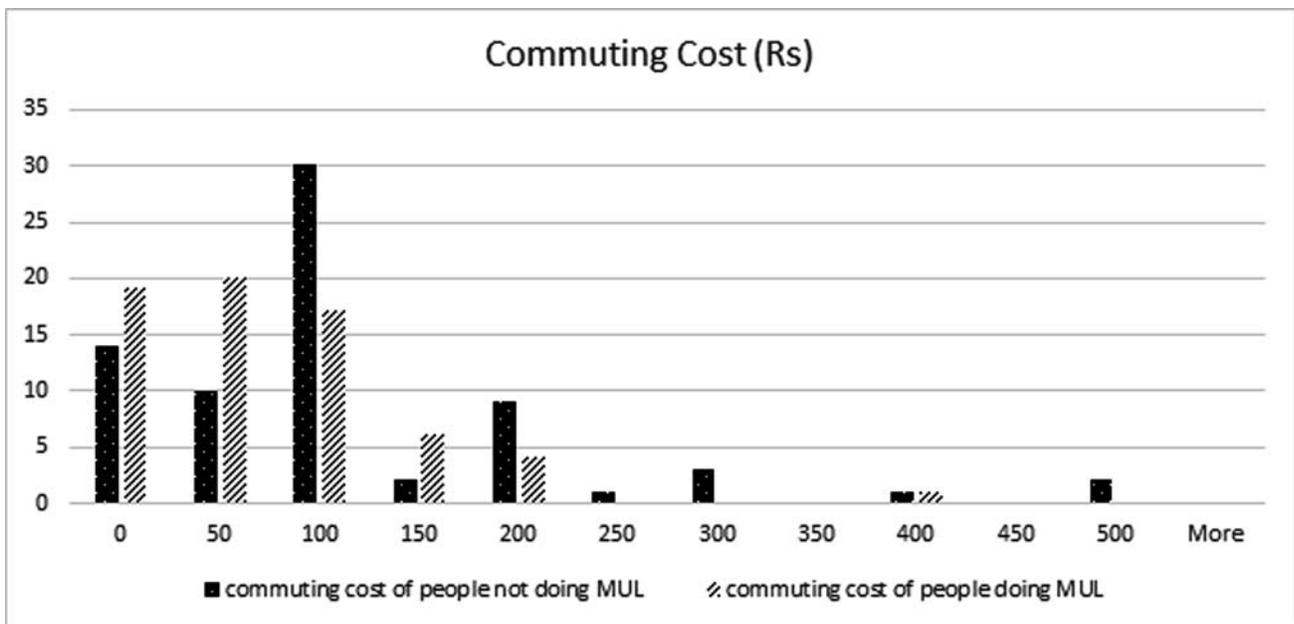
Figure-4: Graphical poresentation of Commuting cost with and without MUL.

by people travelling who are using MUL for commercial and residential purposes and those who are not using MUL. In the figure black bars with dots show the commuting cost of the people who are not using MUL and the bars with diagonal lines show the commuting cost of the people who are using MUL. By comparison of both bars, it can be seen that the majority of people using MUL have low commuting cost, whereas people who are not using MUL have high commuting cost.

Table 5 shows the summary statistics of commuting cost for both groups of people. It can be seen from the table that on an average the commuting cost of people who are using MUL is Pak Rs. 67 per day. While, average commuting cost of people who are not using MUL for travelling is Pak Rs. 110/-. It can also be seen that twenty five percent of people above median are using MUL spent Pak Rs. 100 per day while for other groups commuting cost is Pak Rs. 110/- per day. The difference between lower and upper quartile

Table-5: Data summary of Commuting cost.

	Min	Mex	Q1	Median	Q3	Mean	SD
With MUL	0	400	0	50	100	67.16418	70.29906
Without MUL	0	500	50	100	109.388	110.4085	105.8506

from the median shows that the data is not uniformly distributed from the right and left.

Time Delay due to Congestion

Figure 5 shows the comparison in the time delay due to congestion on a daily basis by people using MUL for commercial and residential purposes and those not using MUL. The black bars with dots show the delay time due to congestion on a daily basis of people who are not using MUL and the other bar shows the time delay due to congestion by people who are using MUL. Generally the time delay due to congestion is less for majority of people who are using MUL as compared to the other group.

According to Table 6 the average time delay of people who are using MUL is twenty percent. While, average time delay for people who are not using MUL is twenty five minutes per day. It can also be seen that twenty five percent of people above median who are using MUL have time delay due to congestion which is thirty minutes per day, while for the other group it is forty minutes per day.

Maintenance Cost

In Figure 6 a comparison of maintenance cost borne by people using MUL for commercial and residential purpose and those not using MUL is shown. The black bars with dots in the figure show the maintenance cost of people who are using MUL and the bars with lines shows the maintenance cost of people who are not using MUL. It can be seen that the majority of people who are not using MUL have high maintenance cost as compared to the other group.

Table 7 shows the summary statistics of maintenance cost for both groups of people. It can be seen from the table that on an average the maintenance cost of people who are using MUL is Pak Rs. 940/- per month. While the average maintenance cost of people who are not using MUL is Pak Rs. 1428/-.

Congestion Cost

The congestion cost from three variables has been calculated as follows:

Figure-5: Graphical poresentation of time delay due to congestion with and without MUL.
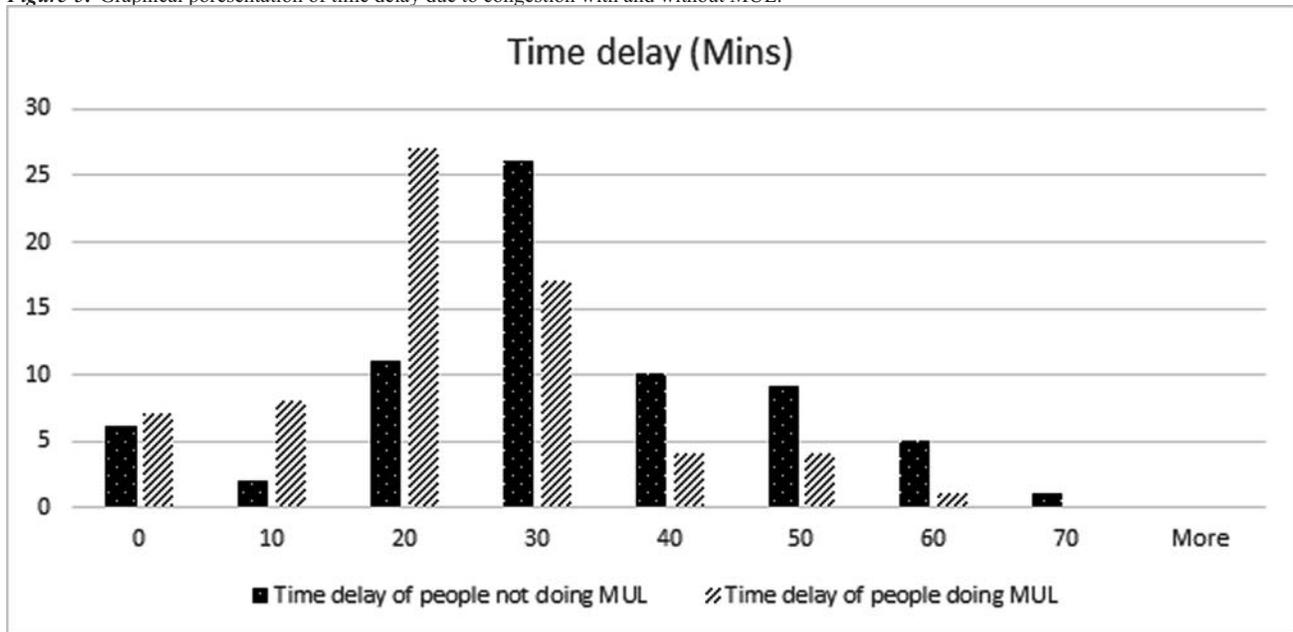
	Min	Mex	Q1	Median	Q3	Mean	SD
With MUL	0	45	15	17.5	30	20.36765	12.5533
Without MUL	0	70	15	27.5	40	25.88571	18.66742

	Min	Mex	Q1	Median	Q3	Mean	SD
With MUL	0	4000	0	500	1000	940.2985	1118.109
Without MUL	0	7500	0	1000	2750	1428.571	1795.402

Time cost = Time delay due to congestion on a daily basis × value of time for individuals.
Fuel cost = Extra fuel consumed due to congestion.

Maintenance cost = Wear and tear cost of people who own vehicles.

Congestion cost = Time cost + Extra fuel cost + Maintenance cost.

Figure 7 shows the comparison of congestion cost borne by people during travel who are using MUL for commercial and residential purpose and those who are not using MUL. Black bars with dots show the congestion cost of people who are not using MUL and the bars with lines show the congestion cost of people who are using MUL. This figure also shows that people who are using MUL and those not using MUL have significant difference in their congestion costs.

Table 8 shows the summary statistics of congestion cost for both groups of people. It can be seen from the table that on an average the congestion cost of people who are using MUL is Pak Rs. 1007/-. Average congestion cost of people not using MUL is Pak Rs. 1659/-. It can be also seen that twenty five percent of people above median who are using MUL incur a cost of Pak Rs. 1618/, while for the other groups congestion cost is Pak Rs. 3000/-
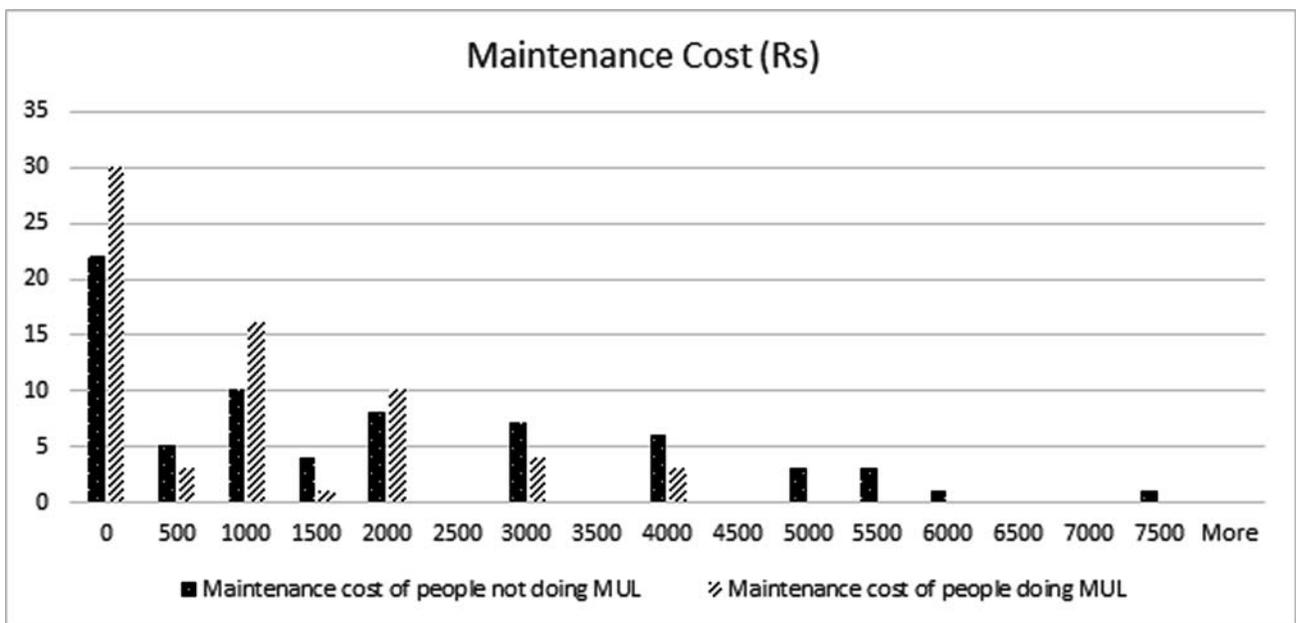
Figure-6: Graphical presentation of maintenance cost with and without MUL.

Table-8: Data summary of congestion cost.

	Min	Mex	Q1	Median	Q3	Mean	SD
With MUL	1.933333	4136.914	97.95875	723.8392	1618.008	1007.878	1049.988
Without MUL	0	7836.464	154.9771	374.175	3053.527	1659.224	1576.023

Table-9: Coefficients of significance in Chi-Square Test and Wilcoxson Sum Test.

| Variables	Chi-Square Test		Wilcoxon sum rank Test	
	Calculated Value	**Tabulated Value**	**T-Statistics**	**P Value**
With MUL	17.053429924	3.84	2.785613816	0.00309466
Without MUL	7.86219573	3.84	2.733233117	0.003640665

Non Parametric Tests

Two non-parametric tests were used in the analysis for the significance of the variables. One is Chi-Square Test and other is Wilcoxon Test. These two tests measured the significance of the hypotheses by T-Statistics, P-Value and Chi-Square values. For both tests following hypothesis were used.

H_o = Medians of commuting and congestion cost are identical for both groups

H_1 = Median of commuting and congestion cost for both groups differ by non-zero

Table 9 explains the significance of the variables of Chi-square Test and Wilcoxon Sum Rank Test. It can be seen that the Chi-Square Value is greater than the tabulated value. So, the null hypotheses is rejected, which means that the median of commuting and congestion of people who are using MUL for commercial and residential purpose and people who are not using MUL it is not the same. Table 9 also shows that the P-value is highly significant in the Wilcoxon Sum Rank Test thus the null hypotheses is rejected, which means that the median of commuting and congestion of people who are using MUL for commercial and residential purpose and people who are not using MUL is not the same.

It is further concluded that people who are not using MUL for commercial and residential purpose bear more commuting
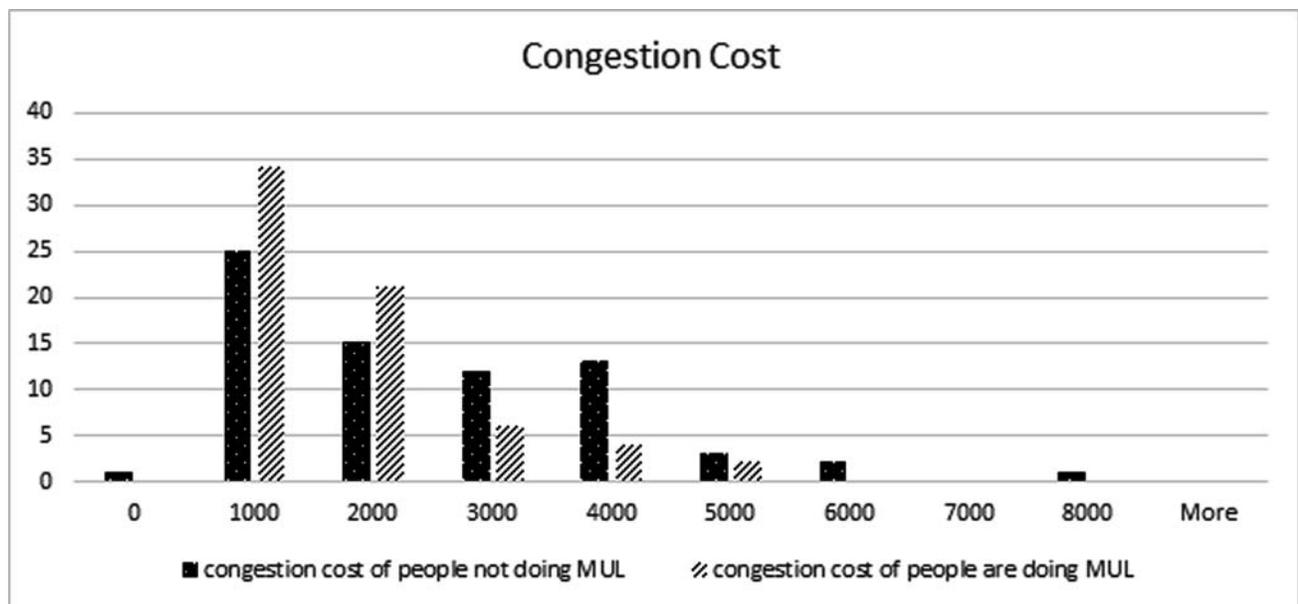
Figure-7: Graphical presentation of congestion cost with and without MUL.

and congestion cost as compared to people who are using MUL for commercial and residential purpose.

CONCLUSION

The relationship between economic growth and land use pattern of cities has attracted significant attention among the economists all around the world in recent years. Economic growth and efficiency can be achieved by the institutional policy reforms for efficient use of urban land. Urban land is the key component for the production and urban land efficiently should be used by adopting mixed landuse pattern, which will reduce commuting and congestion costs.

The data for this research was collected from Urban Unit of Pakistan and some previous researches for big cities of Pakistan. The percentages of land use for commercial and residential purpose in the cities of Pakistan as an input for the indices was acquired from the document of cities crafted by Urban Unit, Government of Punjab. The results indicated that most cities of Pakistan do not use land efficiently despite that there is land scarcity in the cities.

After measuring mixed use of urban land it was found that there is a great link between MUL for commercial and residential purpose and reduction in commuting and congestion cost in walkable communities. To test the hypothesis, that due to MUL there is significant reduction in commuting and congestion cost, a survey was designed from two markets in the same area in Islamabad. The analysis was done by using non parametric approach. The findings confirmed that there was significant reduction in commuting and congestion cost due to MUL for residential and commercial purposes.

On the basis of the findings it is suggested that there is a need to explore the issue of MUL not only for commercial and residential areas in the cities of Pakistan but also for different income groups, to enhance the contribution of cities in the economic growth of country through efficiency. The results also suggest that one needs to adopt MUL to avoid the problem of high commuting and congestion cost in our cities. One has to introduce institutional policy reforms and even incentivize MUL to get benefit of efficient use of resources. The findings need further investigation to have evidence based policies for making our cities as hubs of sharing ideas, innovations, having economies of scale and benefits of specialization. Otherwise, it is feared that our cities can be hubs of crime, pollution, unemployment, congestion and disease. Since, this is a very preliminary maiden study there is great scope for future research in this field in other dimensions of MUL. These dimensions include the impact of MUL for environmental protection and resource use, utility services and infrastructure investment.

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CALL FOR DEMOCRATIC POLICING:
AN ALTERNATIVE PERSPECTIVE ON CRIME CONTROL
IN URBAN NEIGHBORHOODS OF LAHORE, PAKISTAN•

Nauman Aqil*

ABSTRACT

The preponderance of violence in metropolises has been a persistent concern for successive governments of Pakistan. However, it is pertinent to remark that there are often significant variations in the occurrence of violence between physically and socially similar neighborhoods in a single city. This paper sets out to study one highly violent and one mildly violent neighborhood in Lahore, Pakistan, to try to understand how community organizations, physical characteristics and the residents' strategies for crime prevention and control are related to different levels of criminal violence. A qualitative approach was used for this research paper (in-depth interviews were conducted with community residents in each neighborhood). It was found that population heterogeneity, spatial dynamics and a general lack of parochial social control were important predictors of criminal violence. It was noted that both the neighborhoods had customary mechanisms for crime prevention and control but these mechanisms were less employed contemporarily. Notwithstanding the structural conditions, it was also found that social distance between the police and public was also responsible for this decline. Policing in both neighborhoods was largely reactive and residents considered police as part of the crime problem. Consequently, they were not willing to intervene in situations where police was likely to be involved. Based on the case study research the paper concludes that in order to harness community control mechanisms, institutional reforms are required to alter the way in which police functions at operational level.

INTRODUCTION

Violence in cities has become a major security challenge for the State of Pakistan. Despite academic disagreements on the definitions of violence and insecurity, there is a general consensus that violence, in its different manifestations, is both predictable and preventable. Even so, an estimated 1.5 billion people in the world live in conflict-affected areas (World Bank, 2011). An overwhelming proportion of these people live in middle or low-income countries (World Bank, 2011). In addition to the loss of human life, violence has numerous social costs, including poverty and a detrimental impact on health and education. Violence and conflict-ridden countries have only moved slowly towards benchmarks in development indicators.

It is commonly argued that large slums and clusters of poor neighborhoods lead to crime and violence in cities. Nonetheless, the equation is not linear. There is empirical evidence to suggests that, within a city, some neighborhoods are remarkably less violent than others (regardless of local help or foreign intervention). Similarly, not all the cities with large slums experience proportionate levels of violence. Cities are complex 'created environments' and questions relating to urban violence cannot be adequately answered without considering the spatial and social dynamics of their neighborhoods, as these are the concrete places where people live and interact. The micro planning initiatives can help resolve a number of chronic urban issues including crime and violence, however, such initiatives have scarcely been given due consideration.

The macro-perspective on crime and violence is well justified when we analyze national institutions, policies or laws. Notwithstanding the significance of the macro approach, it is difficult to ignore the fact that violence often occurs during the process of social interaction. At the micro level, certain communities or neighborhoods suffer from more violence than others. The variation between the levels of violence,

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in certain areas of an urban system, is interesting because the macro structures influencing these areas are virtually identical. Drawing on a micro-sociological perspective, it may be asserted that community characteristics may be responsible for violence or the absence of it.

In view of this, it has been attempted to delineate neighborhood strategies of crime prevention and control in a more violent and a less violent neighborhood of Lahore, Pakistan. Lahore is an important study area for this research because of the significant variations in criminal violence in its different neighborhoods. What's more, Lahore is rapidly urbanizing and migrants from virtually all parts of the country have settled here mainly to seek better economic opportunities. In this study, a qualitative approach has been used in which narrative interviews have been conducted with interviewees to understand their perceptions and experiences on the research topic described above.

The purpose of this explorative study was to answer the following questions. (1) Which community-level factors are considered relevant to crime and violence in a more violent and a less violent urban neighborhood of Lahore? (2) What are people's perceptions of violence, fear of crime and neighborhood responses? (3) Which specific questions can be asked to benefit further studies on neighborhood violence around the world?

THE CONTEXT

During the last two decades, there has been unprecedented infrastructural development in Lahore. The expansion of city's geographical boundaries and inflow of migrants from rural areas has significantly influenced the social organization of the city. The old city area, which dates back to the Mughal Era – also known as the Walled City of Lahore – is now merely a small sub-section of Lahore, with a population of around 200,000 (New World Encyclopedia, 2008). Like most of the urban centers of Pakistan, development activities in the city have not kept pace with the urban expansion and there are significant disparities between different metropolitan centers of Lahore.

Crime data available from local police stations shows significant variations between criminal violence committed in different neighborhoods of Lahore. However, the city as a whole has been relatively less affected by the current upsurge of terrorist violence in the country (Tables 1, 2).

For the purpose of this study, two neighborhoods – Dharampura and Baghbanpura –were selected (Figure 1).

Table-1: Crime statistics (Lahore) by cateogory
Source: Lahore Police, 2014

Cases registered	2012	2013
All reported crimes	772.7	741.5
Crime against persons	77.7	67.6
Crime against property	272.1	253.6
Local and special laws	205.4	197.5
Miscellaneous	217.5	222.7

Crime rates in Lahore per 100,000 of the general population.

Table-2: Crime statistics (Lahore) by offence
Source: Lahore Police, 2014

Offence	2012	2013
Murder	6.6	5.6
Robbery with murder	0.4	0.4
Kidnapping for ransom	0.5	0.4
Robbery	39.2	37.2

Crime rates in Lahore per 100,000 of the general population.
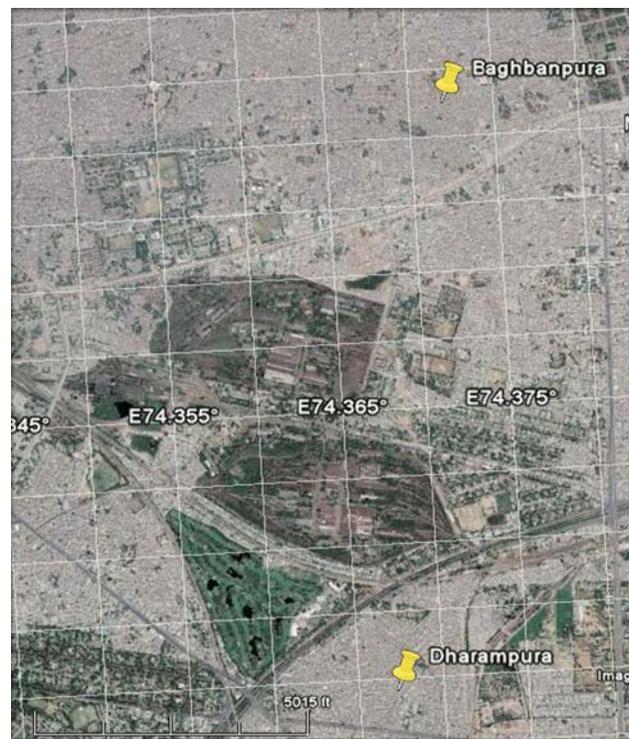
Figure-1: Map of Lahore showing location of the selected neighborhoods.
Source: www.googlemaps.com accessed 23/2/2016

Due to very limited published data on these neighborhoods, a short interview was conducted with a historian to verify local information about these neighbouhoods. A brief profile of these neighborhoods follows.

Dharampura

Situated alongside the canal of Lahore, Dharampura was inhabited mostly by Sikhs before partition of the Indian Subcontinent in 1947. After the creation of Pakistan, a large number of Muslim migrants from the Indian states of Uttar Pradesh and Madhya Pradesh moved to the areas vacated by Hindus and Sikhs, including Dharampura. Today, the population in Dharampura is overwhelmingly Muslim. Since a significant proportion of the residents in Dharampura are migrants, they do not have any inherited land in the province of Punjab. Consequently, most residents are engaged in employment and small business enterprises. Over the past few decades, a number of educational institutions have established in Dharampura and there is a high tendency of sending children to schools. Dharampura is famous for its variety of traditional food stalls and vibrant community gatherings. In common perception, Dharampura is a relatively peaceful area in Lahore and very few significant crime incidents have been reported in the past few years.

Baghbanpura

Baghbanpura (literally, the town of gardeners) is a culturally significant neighborhood of Lahore. Known for its historical Shalimar Gardens, Baghbanpura is a locality that has been inhabited since the Mughal Era, well before the partition of the Indian Subcontinent. The population of Baghbanpura was relatively less affected by the partition and there are only a few migrants from India. Several residents of Baghbanpura are agricultural landowners and the rest are mostly associated with labor and small businesses. A significant number of residents in Baghbanpura belong to a caste called 'Arain', members of which have traditionally been engaged in agriculture-related professions. Caste dynamics are perceived to play a vital role in the political and cultural dynamics of this neighborhood. Another important spatial feature of Baghbanpura is its proximity with Great Trunk (GT) Road, which connects Lahore with other parts of the country. Moreover, it is situated near the Lahore Ring Road, an orbital motorway around the city, which is in turn connected to the National Highway. Baghbanpura has the reputation of being a relatively more violent neighborhood in Lahore.

Despite the historical and socio-cultural importance of these neighborhoods, there was a lack of scientific studies designed to understand their community dynamics. This study provides baseline information regarding the general characteristics of these two neighborhoods and highlights various aspects of criminal violence.

STATE OF THE ART

The pioneer studies of urban phenomena were conducted by members of the Chicago School, who emphasized the ecological aspects of life in cities (Lutters and Ackerman, 1996). In order to study the decay of cities amidst crime, homelessness, and other adverse conditions, members of the Chicago School presented a model of "twilight neighborhoods" . According to this model, population decline and deviant activities were shown to affect the economic structure of cities. Another important contribution of the Chicago School to urban studies was the application of the concept of 'disorganization' to the cities. This approach suggested that in order to adapt to the urban environment, the migrants need to significantly alter or abandon their normative structure . The central theme of disorganization theory was stressful experiences of migrants while settling in an alien environment of the city. What's more, the later currents in Chicago School focused on social order in rapidly evolving urban environments. It discussed that stabilizing factors such as church, community local practices, and communal spaces mitigated the effects of social disorganization (Whyte, 1993; Thomas and Znaniecki, 1919).

As a refinement to their earlier question regarding social decay, the members of the Chicago School also considered the factors which may facilitate disorder and crime. They argued that anonymity, mobility, and individuation are some of the factors which could contribute to social unrest in urban settings . While many concerns of Chicago School may not be scientifically intriguing today, it can be credited with introducing cities and neighborhoods as units of investigation and highlighting the importance of qualitative methods in understanding urban environments (Lutters and Ackerman, 1996).

Inspired from the ecological framework initially posited by the Chicago School, research on intra-societal violence has focused on neighborhoods with specific characteristics such as poor socio-economic conditions (Bellair, 1997), communal or racial segregations (Blau and Blau, 1982), and large concentration of poverty (Morenoff and Sampson, 1997). The sociological explanation for these more violent neighborhoods lies in the weak informal social control exercised by their residents, (Bellair, 2000).

The systemic model of neighborhood crime assumes that social networking and informal control are positively associated and that these are instrumental in reducing crime and violence . Inspired by this model, a number of research has focused on various indicators of social networks such as participation in activities, social cohesion, and local networks (Greenberg, et. al., 1982; Warner and Rountree, 1997) with respect to their influence in enforcing social control. On the contrary, researchers have also shown that strong social ties among people may negatively affect social control. In addition, simultaneity bias has been a classical dilemma in neighborhood research, which further complicates the relationship between social ties and social control (Tuncan and Raudenbush, 1999). A possible reason for these ambiguities is that most studies focused on specific dimensions of social networking and informal control while leaving out the collective dynamics of neighborhood settings.

Empirical studies on neighborhood violence have generally been grounded in the theoretical frameworks for social disorganization (Sampson and Groves, 1989; Bursik, 1988), social capital (Messner, et al., 2004; Forrest and Kearns, 2001), and collective efficacy. More often than not, deductive approaches were employed in these studies, whereby different dimensions of the aforementioned theoretical constructs were tested.

Robert Putnam's seminal work, *Making Democracy Work*, is based on the central idea that social capital significantly influences community problems including criminal violence. Nonetheless, an empirical study of 40 geographic areas in the US found that several forms of social capital are not associated with homicide rates. Rather in some cases, a positive association has been found and some forms of social capital have been shown to be both causes and effects of homicide. A cross-sectional study of American States examining the association between measures of social capital and homicide rates between 1974 and 1993 found significant associations (Galea, et al., 2002). Nonetheless, the study also asserted that this association is not linear and that more complex analytical frameworks are required to determine causal relationships (Galea, et al., 2002).

In this paper, I argue, that an inductive approach to neighborhood violence may reveal the specific mechanisms through which neighborhoods maintain social control. Participatory appraisal has been found to be successful in revealing the dynamics of neighborhood violence, which supports the idea of qualitative endeavors in this field of study (Moser and McIlwaine, 2000). Moreover, micro-level comparative analysis of structurally similar neighborhoods

may also help to establish benchmark for comparison across other neighborhoods, which is an important methodological concern in contemporary neighborhood related research. In addition to the relative lack of qualitative and comparative research on violence, there are even fewer studies that consider the proactive strategies of social actors within neighborhoods which could account for variations in violence. This study is an attempt to fill the substantial gap in literature by considering the issue of violence and non-violence in two neighborhoods in the context of a developing country.

METHODOLOGICAL APPROACH

This section outlines the methodological approach taken in this study and the rationale for the selection of the approach.

Universe of the Study

A qualitative cross-sectional design has been employed to address the research questions. The population in this study included the residents of two neighborhoods in the city of Lahore, Pakistan. The basic idea was to draw a comparison between a more violent and a less violent but otherwise similar neighborhood in the city to explore the extent and forms of informal social control exercised in those neighborhoods.

Sampling

In the sampling process, the foremost issue was to operationalize the concept of neighborhood. Neighborhood is defined as 'a district or community within a town or city' (Oxford Dictionary, 2014). In view of this definition, characterizing an area as a neighborhood is largely subjective. The issue was addressed by relying on the public perception of different areas as distinct localities or neighborhoods. Many areas in Lahore have been established for decades or even centuries. These areas are considered to have distinct sub-cultures and social environment. Thus, the long-standing identity of certain geographical areas as neighborhoods was the basis for operationalizing the concept of neighborhood in this study.

The task of selecting neighborhoods was made easier by the existing administrative division of Lahore by the local police. The Lahore police has divided the city into six divisions and each has an elaborate administrative system. Of these six divisions, the Cantonment Division was randomly selected for this study. Within this division, there are fifteen police stations. Generally, different socio-economic classes in Lahore are aggregated in different regions. Thus, any two

adjoining areas were likely to share similar structural characteristics. In this context, crime statistics for all police stations within the Cantonment Division were obtained and these were scrutinized to ascertain whether two adjacent police stations had recorded significant variations in crime rate in recent years. The crime data with police indicated that the area of Baghbanpura had witnessed consistently more crime than the area of Dharampura in the last three years.

Despite significant variation in crime rates, both of these neighborhoods shared many similar characteristics. Firstly, they were only separated by a neighborhood called Mughalpura and a link road which joined Mughalpura with Baghbanpura. Secondly, both these neighborhoods were known to have both lower middle class and upper lower class populations. Thirdly, both areas were established centuries ago, whereas each had shrines of famous saints (Mian Mir and Shah Hussain), who lived in the 16th century (Kalra, et al., 2013; Wolf, 2006). Finally, these neighborhoods were characterized by narrow streets, small houses, and a high population density.

Once the neighborhoods were identified, interviewees were chosen. The sampling criterion for the interviewees included the criterion that they must be permanent residents of neighborhood and must have been living or working there for at least five years. The sampling approach for this study was developed together with Sebastian Huhn, Noam Lopez, José Salguero and Princess Hammanobels. This sampling method provided with an opportunity to choose interviewees who were likely to yield rich and in-depth information about the dynamics of violence in their neighborhoods. Ten interviewees were chosen from each neighborhood. The list is as follows:

i)   Community organization representative
ii)   Local politician
iii)   Barber
iv)   Imam (religious leader)
v)   The police officer
vi)   Private employee
vii)   Private security guard
viii)   Rickshaw driver
ix)   NGO/ union representative
x)   Youth representative

Data Collection and Analysis

Data was collected from two neighborhoods through twenty in-depth interviews comprising 31 open-ended questions.

The questions were drafted on the basis of available literature on the subject. However, an attempt was also made to allow the interviewees to narrate their experiences and perceptions of neighborhood violence.

After each interview, semi-verbatim transcripts were drafted from the recorded data. The transcripts were later translated into English and edited transcripts were coded and then analyzed using the thematic analysis technique. Nonetheless, thematic analysis was not purely inductive. Given the substantial amount of literature on the topic under study, certain categories and concepts were specifically sought in the data. The findings of the study were presented under themes derived from the coding.

FINDINGS

This section outlines the themes generated through data analysis and those that were specifically sought in the data.

Social Bonding in Transformation

The findings of this study reveal that patterns of interaction among neighbors have undergone significant change over time. Several interviewees in the more violent neighborhood (Baghbanpura) said that the social ties among neighbors have weakened. More often, the reason cited for this change was competition for resources. Interviewees realized that community members were preoccupied with their individual quest for better living, and traditional ties among neighbors were limited to ceremonial activities and greetings when they met. Moreover, some interviewees perceived that people no longer liked to share their problems with others.

A private teacher from Baghbanpura said:

"In the past, people used to sit at Chaudhary's (community notable) place and discuss their matters. Now everyone is a Chaudhary. How will one visit the other?"

In addition, some interviewees from Baghbanpura pointed out that one reason for less interaction among people was the absence of traditional places where people could meet. With a growing population, housing structures have undergone change. Moreover, housing units have been built over vacant areas. Spatial congestion has resulted in fewer opportunities for community gathering.

A civil society representative from Baghbanpura said:

"Here are no places available for public gathering such as

parks and grounds. Young people can gather at snooker clubs but these are infested with gambling, which results in feuds among the guys."

Although the interviewees thought that social interaction has weakened, they could only present evidence which referred to changes in patterns or avenues of interactions, rather than the interactions themselves. It was noted that interviewees of all age groups referred to the previous generation as having been more interactive. This finding was consistent with most of the interviewees' views and they referred to a locally popular phrase, "the old times were the best times". Nonetheless¸ their understanding about the "old times" and the "best times" was rather obscure. It was also significant to note that almost all the interviewees in Baghbanpura were of the opinion that, despite changes, interaction among people was still better as compared to other areas of the city.

On the other hand, the situation was not very different in Dharampura. Interviewees were concerned with the lesser interactions among neighbors. A number of interviewees were of the view that people-to-people interaction has decreased. Generally, the reason cited for this was opportunities for in-house entertainment and the different priorities of the younger generation.

A rickshaw driver from Dharampura said:

"We (our generation) were very gregarious. Nowadays, boys are obsessed with cable (satellite television channels), computers and mobile texting."

Despite a general decline in the level of social networking, it was found to be a significant predictor of non-violence in neighborhood settings. Generally, the less violent neighborhood (Dharampura) had more opportunities for social networking compared with the more violent neighborhood (Baghbanpura). However, this finding needs to be explored in more detail. It was also noted that several interviewees from both neighborhoods were skeptical about social and technical change. They referred to the use of Information and Communication Technologies (ICTs) as a reason for lower cohesion among neighborhood residents. Moreover, they considered sitting in a park to be socially viable, but playing snooker in indoor clubs was seen as a deviant activity. It was felt that their views about reduced social interaction were rooted in their apprehension about modernization and virtual communication technologies.

Community Organizations as Avenues of Social Control

A significant number of interviewees in Baghbanpura said that there were only a few community organizations in the neighborhood and they were not very effective in addressing community needs. Moreover, some interviewees were of the view that community organization were run by politically motivated people for their own vested interests. Generally, the office bearers of these organizations did not enjoy a good reputation within the neighborhood and they were thought to be mostly visible at the time of local or national elections.

A civil society representative from Baghbanpura said:

"The main committees or organizations have members who are mostly 'badmaash' (hooligans). Gentle people have nothing to do with these organizations."

A local police officer from Baghbanpura said:

"Traders' organizations dominate the landscape of community organizations in this area. They mostly advocate issues relating to markets and trade disputes. They rarely interfere in community-level issues."

The efficacy of community organizations was perceived to be better in Dharampura. Several interviewees were of the view that community organizations make a significant contribution to addressing the needs of the marginalized segments of neighborhood. Some interviewees mentioned organizations that were working for education, vocational training of women, and the management of religious festivities.

A barber from Dharampura said:

"We run an organization which was set up to support poor people when they are in need of our help. We have crockery and utensils, which we provide free of cost to poor people at events such as marriages and funerals of their family members."

In addition, there were also some organizations which worked to achieve settlement of disputes and to prevent violence in the community as a latent function. The members of these organizations were community notables, who had some influence over other neighborhood residents.

A NGO representative from Dharampura said:

"Our organization strives to draw people towards religion. Once they start loving God, we believe that violence will subside. Secondly, our organization has settled a lot of family disputes as well as quarrels between people over property or other practical issues."

Institutionalized mechanisms for community interaction are likely to result in greater capacity for collective actions on mutual issues. As such, the efficacy of existing community organizations in a neighborhood is important in terms of crime prevention and control. The relatively high effectiveness of community organizations in Dharampura compared with Baghbanpura confirmed this proposition. However, perceived perpetrators of crime were also found to be involved in community organizations in Baghbanpura. Apparently these perpetrators used the social capital generated from these organizations to pursue their vested interests. These platforms may also increase bonding between perpetrators of crime as noted in some previous studies also (Moser and Mcllwaine, 2004; Rubio, 1997).

Blaming the Outsiders: Community Perceptions Regarding Perpetrators of Violence

The study findings revealed that a lack of education and unemployment are largely seen as factors leading to violence in both neighborhoods. Additionally, in Baghbanpura, it transpired that unfavorable working conditions in the adjoining industrial area were perceived to be contributing to violence. Baghbanpura also had a highway close by which was perceived by some interviewees as an easy escape route for the perpetrators of violence. Moreover, some interviewees considered migrants to be largely responsible for crime in the neighborhood. Only a couple of interviewees hinted that there might be organized criminal violence headed by influential political groups.

A local politician from Baghbanpura said:

"People from Narowal and Shakargarh (cities in Punjab) have settled here during the last 10 years. Their identity is relatively anonymous. Some of them have a criminal history. Their relatives come here to visit them and commit crimes."

A local police officer from Baghbanpura said:

"A large number of people here are involved in the steel industry. They are forced to work in inhuman conditions. These workers are mostly drug addicts. Whenever they are

out of job, they get involved in crime to buy drugs."

A union leader from Baghbanpura said:

"Informal settlements have increased significantly during last decade or so. The police surveillance in these areas is weak. Residents of these settlements commit crimes in settled areas and then go back to their slums."

The interviewees from Dharampura were of the view that young boys involved in drug abuse and other immoral activities are the main perpetrators of crime and violence. Moreover, some interviewees complained about a lack of street lighting and prolonged load shedding in some areas which, according to them, have facilitated crime.

The findings from the study revealed a perception that there are more actors involved in perpetrating violence in Baghbanpura compared to Dharampura. Most perceived perpetrators in Dharampura were deviant individuals or groups within the neighborhood. On the other hand, perceived perpetrators of violence in Baghbanpura hailed from outside areas. Moreover, there were hints of organized violence in Baghbanpura, whereas no such evidence was found in Dharampura. It was interesting to note that interviewees from both neighborhoods were aware of the structural causes of violence and emphasized good governance as the ultimate solution to deviant behavior.

Consistent with social disorganization theory, it was found that residential instability and heterogeneity positively influenced criminal violence in the neighborhoods. This was specifically true for Baghbanpura where an influx of new residents was perceived as a risk factor for violent behaviors. This finding was consistent with most of the classical studies on neighborhood violence, which took social disorganization as their fundamental analytical frame (Sampson and Groves, 1989; Bursik, 1988). Similarly, earlier studies conducted by the Chicago School also hinted about adjustment problems which migrants faced in urban environments.

In addition to residential instability and population heterogeneity, the spatial characteristics of Baghbanpura were perceived to be an important factor in escalating criminal violence Moreover, a lack of public spaces for community interaction was found to have weakened social control in both Baghbanpura and Dharampura. Previous studies on urban crimes and informal territorial control also had similar results where difference in spatial characteristics

between neighborhoods accounted for variations in violence among them (Greenberg, et al., 1982; Morenoff and Sampson, 1997; Morenoff, et al., 2001).

Neighborhoods' Capacity of Social Control

Although level of interaction among the community residents had undergone change in both neighborhoods: the ability to act collectively in order to prevent violence was found to be high. People in Dharampura were mostly native residents of their area and they enjoyed a high level of mutual trust. Social capital in Baghbanpura was also high, but the spatial dynamics of the area and other factors such as rural-urban migrants seemed to hamper the residents' ability to control violence. Baghbanpura was perceived to have undergone extensive expansion and many new housing schemes had been developed. The reason cited for this expansion was the increasing population in which the younger generation was not able to live in the small houses of their parents. Furthermore, the establishment of new industrial units along the boundary of Baghbanpura had attracted people from other areas to settle there. On the other hand, Dharampura was not reported to have expanded geographically to a similar extent.

Despite this variation, both neighborhoods' residents were able to perform collective action in emergency situations, despite the low frequency of regular ties. It was also noted that the role of community elders in conflict resolution had decreased over time but it still remained an important aspect of peace building in neighborhoods.

A security guard from Baghbanpura said:

"People interrogate any stranger coming into our area. Our community is very conservative and does not allow outsiders to roam in our neighborhoods. This strategy is very useful in controlling crime and I support it."

Compared with Baghbanpura, social capital in Dharampura was perceived to be higher. A significant majority of the interviewees assured that they had trust in their neighbors and they were always ready to help each other in difficult situations. Several interviewees in Dharampura referred to the significance of informal strategies for crime control. Moreover, it was found that social networking between residents of Dharampura was high and people generally knew other residents.

A barber from Dharampura said:

"Elders in the community intervene in the event of a quarrel between the neighborhood's residents. With their intervention, many conflicts are readily resolved since people respect the elderly and their decision is considered binding over conflicting parties."

It was noted that reporting to the police was not common in either neighborhood. Only heinous crimes were reported to the police, whereas routine conflicts were resolved at the local level. Thus, informal means of social control were central to crime prevention in these neighborhoods. Vigilance of neighborhoods by the residents was common but in Baghbanpura, the rapid expansion of the area and the arrival of new immigrants reduced its effectiveness. On the other hand, the population in Dharampura was relatively static, which facilitated a high level of informal social control. Nonetheless, most of the interviewees from both neighborhoods expressed concern about the depletion of cultural resources that could prevent violence.

A local police officer from Baghbanpura said:

"The community policing concept could not be implemented properly in Lahore. The way our communities are integrated through cultural ties, I believe that institutionalizing community vigilance through community policing can prove to be very effective for crime control."

Although the patterns of interaction between the community members have changed, social capital remains an important element of life in these neighborhoods. Since residents have lived in these reighbourhoods for generations, they have established networks and there is a high level of trust amongst them. Nonetheless, due to lower day-to-day social interaction among residents, the ability to form groups is perceived to be low. In this study, the interviewees attributed low social cohesion to broader lifestyle changes occurring across the country.

The findings of this research suggest that although social cohesion is low, neighborhood residents share trust and values to act on behalf of community in cases of crime. Previous studies have referred this capacity of community as 'collective efficacy' in which collective action is performed by residents despite weak social ties. In this study, however, such collective actions were unorganized and perceived to be in decline. Some instances were recorded in this study where collective action by residents was found to discriminate against minority members in the neighborhood. This aspect

of social capital has been dealt with in a study where the negative effects of social networking have been denoted as 'perverse social capital' .

Vigilantism as a Product of Ineffectiveness of Legal Institutions

The findings revealed that interviewees from both neighborhoods approved of violence in situations where someone was caught committing a crime. An overwhelming majority of interviewees said that they would support public thrashing of criminals so that people would witness the incident and the moral standards of society would be reinforced. When asked whether handing over the accused to the police was a better option, several interviewees expressed their dissatisfaction with the police. They felt that Pakistani legal processes were expensive and time consuming. That was why people were reluctant to report crime and violence to the police.

Interviewees were of the view that criminals were usually not convicted and were often released due to legal lacunas, and sometimes due to a lack of appropriate legislation for certain offences. Some of the interviewees also talked about the rampant corruption in police departments, due to which people no longer trusted the law enforcement agencies to deliver justice. The behavior of police personnel was also criticized by the interviewees as unfriendly, and sometimes insulting. No significant difference was observed in the opinions of people regarding 'street justice' in the two neighborhoods, which suggests increasing legitimization of violence in society as a whole.

A rickshaw driver from Dharampura said:

"If you go to the police station to file a complaint, they will start interrogating you. Sometimes, they declare the complainant as accused. Whatever the case may be, a poor person cannot get relief from our police."

Contrary to general approval of violence as a way to punish criminals, some interviewees, including police officers in both neighborhoods, disapproved of this practice (by the public). However, these interviewees also had mixed opinions when asked about the violence committed by police against criminals.

A local police officer from Dharampura said:

"We (generally) employ scientific methods of investigation…Even if some thrashing is done to extract

evidence, we should not object to a criminal getting deserved treatment."

There have been numerous studies of this phenomenon, which is referred to as 'vigilante justice' or 'vigilante behavior' (Neapolitan, 1987; Asfura-Heim and Espach, 2013; Stan, 2011). More often than not, such behaviors are attributed to the ineffectiveness of law enforcement agencies. In this study poor performance of police was also perceived as a justification for vigilantism by the interviewees.

CONCLUSION

Neighborhood violence is an endemic concern for local governments and societies all over the world. The case of Pakistan is no exception in this regard. Despite strong community structures in Pakistani society, crime statistics show that levels of criminal violence have remained high in recent years. Rapid urbanization and changes in labor market dynamics have also resulted in population heterogeneity; consequently, individual anonymity has increased. If these challenges are not dealt with through effective urban planning and management, they may have serious implications for the proliferation of conflict and violence.

The aim of this study was to understand people's perception of violence, fear of crime, and neighborhood responses. Given the perceived maleficence of the police, local strategies of informal social control were found to be important factors in controlling criminal violence. However, these activities were limited to random vigilance, settlement of disputes within community settings, and surveillance of children's activities. It was noted that the traditional role of community elders in mitigating conflict has also declined. Whether this was due to modernization or other related changes, it was observed that it was more of a transformation in control mechanisms than the actual voidance of them. The effectiveness of these evolving control mechanisms was limited because the state institutions were not able to exploit the community potential in terms of crime and violence prevention. While the government's resolve to maintain law and order is widely questioned, it is important that communities' strategies to prevent violence are streamlined. In this regard, the policing strategies might benefit from being "indigenized" to conform to local cultural values.

Mistrust of law enforcement agencies was reflected in perceived low reporting of crime to the police. Comprehensive reforms within the police are required to restore the confidence of residents. The weakening of

community capital – coupled with the perceived ineffectiveness of the police – may well result in a vacuum in which criminal violence can flourish. It was found that community vigilantism in the target study areas was high, whereas violent behavior also enjoys a considerable degree of legitimacy in certain situations. It was found that the behavior of the police and cumbersome legal procedures were at least partly responsible for vigilantism. It was noticed that fear of crime go hand in hand with the fear of police especially among the vulnerable segments of the society.

In Pakistan, several legislative and administrative measures have been undertaken designed to empower communities to manage their local affairs. Although these measures have been downplayed for a number of political reasons, they would not have produced optimum results even if they were operational. One reason for their ineffectiveness is that the people who became beneficiaries of these measures were perceived as perpetrators of crime by the community. A lack of local ownership of these broadly based measures was thus one of the key factors that contributed to their relative failure. A sense of collective ownership cannot prevail until

community members' interpretation of reality and their subjective opinions about neighborhood dynamics are taken into account.

When investigating the dynamics of metropolitan cities such as Lahore, we should not underestimate the complexity of socio-economic relations and the multiplicity of opportunity structures in which people's lives unfold. Community-level factors and residents' experiences reflect the intricate realities that are most likely to be ignored in mainstream policy agendas. Even comparing two similar neighborhoods in a city, it is concluded that substantial variations in policing strategies are required for effective law enforcement in each neighborhood. A one-off incident in a particular time and space may have a significant bearing on the fear of crime and local perceptions of levels of criminal violence. Contrary to these observations, I found that policing in both the neighborhoods was highly centralized, monotonous and reactive. In order to revitalize a community's sense of safety and to reinforce its confidence in law, police needs to engage with local residents in a democratic manner.

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KARACHI BRT AND ITS IMPLICATIONS FOR POLICY AND INSTITUTIONAL VIABILITY

Anam Rafiq

ABSTRACT

In the last decade, cities worldwide have recognized the pressing need for high quality transport to challenge the growth of rapid motorization. Karachi, being one of the fastest growing cities in the world with a unofficially recorded population of 22 million, coupled with inefficient traffic management schemes, lack of integrated planning, ageing public buses and a turbulent political history, is failing to meet the needs of its residents. Travelling from one place to another has become very time consuming, as many people have to change multiple buses just to reach their end destination in dire conditions.

Despite living in times of greater mobility, our society has become more polarized. This heightened mobility has gravely disadvantaged particular members of society, such as low-income residents, children, women and the elderly, according to Prof. John Adams public lecture in 2009 at University College London. Longer commuting times, congested roads, and elevated carbon dioxide levels have now shifted global perspectives into reassessing their values; resulting in the emergence of mass transit mega-projects.

There is an absence of critical research and analysis on understanding the underlying issues in previous failed transport interventions. This paper aims to analyze past projects and assess the direction of transport policies to form an understanding of why many projects have not been successful, focusing in particular on the policy and institutional aspects and what are the implications for the current Bus Rapid Transit (BRT) system. Then by analyzing two emerging cities with different urban, political and financial contexts, lessons for Karachi have been extracted keeping Karachi's urban context in mind.

INTRODUCTION

Many mega projects, due to their sheer size and despite their seemingly controversial nature, usually begin with positive intentions. Whether they are olympic stadiums, highways or mass transit systems; cities use mega projects to stimulate economic growth and enhance their global competitiveness. Altshuller and Luberoff (2003) suggest that politicians undertake mega projects to gain recognition with little attention to the broader context and effect of the project. Projects that fail their purpose too often end up becoming 'white elephants', thus reinforcing the failures of the government. Hence it is imperative to holistically plan mega projects to have a positive effect on society.

An effective master plan allows policy makers to dictate how the city should grow spatially. Policy, therefore, has become more crucial than ever, as solutions to provide mass transport and the need to change travel behavior becomes more imminent. A mass transit mega project has a higher probability of success if planned with strategic land use polices, motor vehicle restrictions, options of non-motorized modes and traffic management strategies (ADB, 2009; Newman and Kenworthy, 1999). Newman and Kenworthy (1999) argue that strategic land use policies such as creating high density and mixed-use developments will discourage driving. Therefore, governments need to play a crucial role in changing travel behavior and pattern. Moreover, Asian Development Bank (2009) suggests that power needs to be vested in a central governing body that has the authority to plan, implement and self-finance these strategies (ADB, 2009). This, however, has been a constant issue for the city, as different authorities control different parts of Karachi and the city government only owns 31% of the land (Hasan and Raza, 2015).

Karachi being a port city is an important centre of economic activity. Increasing congestion, high accident rates and higher travel times may reduce productivity and cause economic losses. Karachi, therefore, is attempting to deliver its first BRT mass transit mega project with help from Asian Development Bank. BRT assistance systems are generally not defined as mega projects, however, Frick (2008) suggests

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that projects that are controversial and complex can also be categorized as one. Although Karachi has had its fair share of transport proposals, none of these plans have materialized, with the exception of the BRT, which is scheduled to start this year. The BRT's success can not only drive future development, but also restore faith in the government. The proposed BRT system in Karachi has the potential to reduce travel times, create new jobs, and mitigate the negative environmental impacts. On the other hand, its failure will be very costly for the tax payer.

BUS RAPID TRANSIT

Wright (2005) indicates that BRT gained recognition in Latin America with Curitiba being one of the first cities to successfully implement it, thus challenging the advance of rapid motorization. Bogota, Columbia then showed the world that buses could be an attractive solution if planned and delivered properly. Bogota's Transmilenio provided high capacity and quality transport solutions at relatively low cost compared to other transport solutions. It is often thought that only metros are the right solution for sprawling cities however, they are too expensive. Buses are traditionally associated with a negative connotation for being unreliable and slow, although buses can be an attractive solution if planned and delivered properly. Nowadays, cities worldwide have replicated the BRT system as it is relatively inexpensive and have a shorter construction period. BRT, if planned in conjunction with the right policies can have many positive social, economic and environmental benefits.

Implementing a BRT solution is not a one-step formula, the key to success is in making smart and informed early decisions (Allport, et al. 2008). Wright (2005) suggests that political will is an important factor in implement at on of BRT systems around the world, as governments want to leave a lasting legacy. Therefore, most of the successful mega projects have had strong institutional frameworks with technical expertise and positive intentions to benefit the society. On the other hand, Karachi lacks the institutional capacity to follow through and to manage transport projects. This is also because Pakistan has had a particularly difficult political history, a turbulent law and order situation, along with ethnic rivalries, military interference and corruption, which has shaped the country's priorities that often find an interface with large public sector policies and projects. The contested political and governance space in Karachi in particular offers unique challenges within the Pakistani context that have had and likely would have a strong bearing on the possible success or failure of projects such as the BRT.

HISTORICAL BACKGROUND

Understanding Karachi's urban and transport system in its historical context will facilitate the discussion on how to avoid mistakes committed in the past that constrained the capacity of the interventions to bring long term and viable improvements in the system. There have been several initiatives introduced by the government to solve the issue of transport; however, there were a lot of factors that caused these projects to fail. It is strongly felt that a failure to recognize and address these issues now may result in the failure of the recently launched BRT project.

Residents have suffered for over sixty nine years because policy makers have proposed different policies and related projects at different time periods that have not made sense holistically. Focus has been on 'projects' – large or small, to tackle the relevant development challenges, rather than integrating projects with a holistic policy and institutional framework. After years of project-based interventions, the 1973-85 Master Plan finally recognized the need for a mass transit solution. By then, government interventions were ineffective and the policy had also shifted to more road-based schemes, leaving very little public funds for transportation projects.

Post Partition

Karachi was once a transport dependent city with high quality trams, inter city rails as well as buses servicing important parts of the city left over from British India. Following the partition, there was an influx of migrants that settled in the urban core and its peripheral vicinity. The tram was popular amongst residents as numbers grew from sixty four in 1954 to one hundred and fifty seven by 1955 (Hasan and Raza, 2015).Due to lack of maintenance, the tram was in bad condition (Imran, 2009) and was causing congestion in the urban core (Hasan and Raza, 2015). The current transport system was unable to cater to their needs due to congestion and financial reasons. After ninety years of service, the system was dissolved in 1975. Sohail (2000) suggests that this period was difficult for the newly independent country as the influx of migrants and economic pressure put a lot of pressure on transport as the demographics from 1951 showed that population had increased by 150%.

From the recommendations of the First Five Year Plan 1955-60, the West Pakistan Road Transport Board was formed in 1957. At this time, the focus was on improving the existing railway, but not expanding it, along with the creation of 1800 miles of new roads (Imran, 2009). This shows how

the government was slowly switching its focus from public transport to automobiles as the Plan recommended new road networks.

Due to the martial law in 1958, decisions made by the government changed the landscape of Karachi (Sohail, 2000). In response to the densification of the urban core, the government drew up the Karachi Resettlement Plan in 1959 in attempts to move the migrants out of the city center to satellite towns to set up new industries (Hasan and Raza, 2015). The industry never flourished and thousands of migrants, in the absence of a public transit system, had to commute long distance to go to work.

Aftermath of the Martial Law

To meet these new transport demands, the Karachi Road Transport Corporation (KRTC) was established in 1959 to oversee bus-based transport projects in Karachi (Sohail, 2000). The KRTC produced three hundred and twenty five buses and had depots and workshops to train drivers. The Second Five Year Plan (1960-65) even allocated money to KRTC to expand its fleet. However, the Plan prioritized road-based construction as it stated that the car was more adaptable and flexible than rail (Imran, 2009). Imran (2009) argues that international consultants like the World Bank encouraged this ideology, along with privatization of transport.

In the 1960s, there was heavy emphasis on industrialization and green revolution, which encouraged more migrants from within the country (Sohail, 2000). The rapid industrialization from the green revolution increased economic pressures, but exacerbated the housing and transport situation, as they did not expand proportionally to the growth in population (Sohail, 2000). Moreover, Imran (2009) suggests that expansions in the city changed the spatial structure and made non-motorized modes, such as walking and cycling more difficult, thereby encouraging a modal shift from non-motorized to motorized.

The second master plan reinforced the privatization philosophy and invited the private sector to invest in transport (Imran, 2009). This caused a proliferation of private buses, which had serious consequences for the city as the transport sector is dominated by a single ethnicity (Sohail, 2000). Similarly, KRTC was also privatized for unknown reasons (Hasan and Raza, 2015). Scholars (Pucher et. al 2004; Tiwari, 2002) imply that privatization of transport services can be efficient and have higher productivity, if an institutional authority ensures successful integration with all existing services.

The plan also called for the creation of the Karachi Circular Railways (KCR) in 1964 to meet transport demand. It was the first and last rail based project in Karachi. The KCR first served the industries, but was expanded to include commuters. It made one hundred and four trips daily in the 70s, and was known for its cheap and reliable service (Sohail, 2000). For the next fifteen years it continued to provide services, but gradually decreased the number of trips. By 1979, the trains needed maintenance, but the government was not allocating enough funds. By 1985, the train was losing Rs. 12 million as ticketless travellers had increased (Sohail, 2000). By 1998, although the population had reached around nine million, KCR was losing around Rs. 6 million, while making only one trip a day (Sohail, 2000). Another argument is that the informal transport sector, also known as the 'transport mafia' wanted KCR to go out of business, so they pressurized the government (Hasan and Raza, 2015). Alongside KCR in 1968, the government tried to introduce another bus-based intervention called the Omnibus. Within a year, it proved to be unsuccessful and was disbanded immediately.

Rise of the Transport Mafia

Multiple failed transport interventions led to the free transport policy in 1971. The government needed help from the private sector to meet transport demands (Hasan and Raza, 2015). Any individual could purchase a bus and apply for a route permit. However there was no mention of regulations or standards set in place. Most people went to moneylenders, based in the province of Khyber Pakhtunkhawa, to buy a bus (Hasan, 1999). Moneylenders purchased mini-buses because they were affordable, however their capacity was limited. Over three hundred and twenty nine routes were issued; however, only one hundred and eleven are in operation now as the other routes were not profitable (Hasan and Raza, 2015). The situation resulted in the informal sector establishing their political and economic hold in the city (Sohail, 2000).

By the 1970s, squatter settlements on the periphery, minibuses, cars and motorbikes had increased rapidly, causing congestion and environmental degradation. The number of motor vehicles had increased to one hundred thousand and motorcycles had grown to about seventy five thousand (Sohail, 2000). As a result, a new master plan was created with the assistance of the United Nations Development Programme (UNDP). A new authority was formed to prepare the Karachi Master Plan 1974-85 (Sohail, 2000). The master plan, keeping in mind the influx of new migrants from the Afghan War, called for the development and expansion of

new roads and networks, providing adequate housing and infrastructure for the squatter settlements along with plans to develop a suitable transport system (Hasan, 2015). Moreover, the government also had plans to develop a new light rail transport (LRT) along with expanding (KCR), which was achievable considering funds had been secured as well.

Even though the plan was promising, political situation worsened as another Martial Law was imposed in 1977. The subsequent governing authority dismissed the LRT project, and abandoned the UN Master Plan (Hasan and Mohib, 2003). As a consequence, lack of planning resulted in more informal settlements along the urban core, which increased the need for travel. The result of the new military rule led to the rise of ethnic politics, violence and corruption, which is causing serious problems till today (Sohail, 2000).

Lack of Institutional Capacity

The new government introduced another bus-based project in 1977 under the authority of the Karachi Transport Corporation (KTC). This authority was legitimized, as it was part of the Karachi Master Plan. KTC introduced five hundred and fifty buses along with new bus terminals (Hasan and Raza, 2015). It also linked with the automobile industry to build large buses to accommodate more passengers. The project was going well as within a year the number of buses increased and even the training institute was re-introduced.

By the 1990s, KTC began experiencing similar problems seen in other projects. There was mismanagement and a lack of technical expertise to maintain these buses (Hasan and Raza, 2015; Sohail, 2000). Hasan and Raza (2015) suggest that the government's capacity to manage the transport projects was low as poor quality spare parts were used, government subsidies were not fulfilled and the technical staffs were not trained properly. By 1996, only hundred buses were operational and the losses were around Rs. 10 million. This was also because one hundred and eighty five buses were destroyed in the political turmoil in 1994-96 (Hasan and Raza, 2015). The failure of the KTC reinforced the belief that only the private sector could manage public transport, although it still tried to introduce other bus-based projects.

A new master plan emerged in the 1980s with the assistance of UNDP called the Karachi Development Plan (KDP) 2000. This plan failed to recognize and consult the informal sectors in the city, which had become very influential (Hasan and Raza, 2015). The plan was not implemented as it failed to

recognize the lack of institutional capacity, as many of the recommendations had no legal basis (Sohail, 2000). By the 1980s, the informal transport sector had amassed considerable influence as they exerted their influence to alter an important law (Sohail, 2000). If a mini bus killed someone, the driver would be charged as per Section 304-A (accidental death) and not under Section 302 (murder). Sohail (2000) suggests that this caused the rise of ethnic politics in Karachi.

Project Based Bus Interventions

A key feature of the KDP 2000 Plan was to build eighty seven kilometer of transit ways for buses or rail, which gave way to the emergence of the Karachi Mass Transit Plan in 1987. The government recognized the pressing need to develop a mass transit system due to the unplanned growth of the city and the demand for transport. The study had proposed elevated transit ways with a light rail system and had even looked into the social and economic benefits of the city (JICA, 2012). Despite its appeal on paper, the project may have been too ambitious and failed to conceptualize the financial aspect and the institutional capacity of the project. Hasan and Mohib (2003) suggest that political instability was another factor in the failure of KDP 2000.

From 1996 onwards, the government undertook several bus-based initiatives, despite their previous failures. These projects were introduced during political uncertainty, the on-going Compressed Natural Gas (CNG) crisis, ethnic riots and rising corruption rates. As a result, they weakened public faith in managing transport projects. Projects such as the Karachi Public Transport Society (KPTS) in 1999 and the Urban Transport Scheme (UTS) in 2001 all started with much enthusiasm, but deteriorated due to a lack of government subsidy and mismanagement (Hasan and Raza, 2015; Imran, 2009).

The reason for KPTS's initial success was because the government had provided them with security from the 'Transport Mafia', but as (Hasan and Raza, 2015) soon as the owner passed away, the business was sold and disbanded. In 2001, the private sector was again invited to invest in the UTS. This intervention was a disappointment as the government failed to provide the subsidies needed to compete with the informal sector along with preferential treatment on lucrative routes (Hasan and Raza, 2015). Eight out of the thirteen investors suffered heavy losses, leading to a lack of mistrust and faith in future government projects.

This lack of faith in the government led to a lack of investors in the next government transport intervention in 2007: the

CNG bus project. Instead of its planned 2000 buses, the government invested in seventy five buses (Hasan and Raza, 2015). Shortly after the project was discontinued due to high operational costs, CNG shortage and the worsening political situation.

Response to the Failed Transport Intervention

By 2002, the market response was to introduce *qinchi* to meet increasing demand. They were serving areas which were out of range for buses. Although they are banned now, there are still 14,000 operating in the city (Hasan and Raza, 2015). The public also responded to the transport crisis by purchasing motorbikes, as they were affordable and faster than public transport. Five hundred thousand motorbikes were purchased in 2005 to over one million in 2010 (Hasan and Raza, 2015).

Another transport plan was proposed by JICA under the Karachi Transport Improvement project in 2005. The plan initially called for a light rail transit (LRT), but changed to BRT and called for the revival of KCR (JICA, 2012). However, the KCR revival project has been delayed due to the absence of institutional ownership and encroachment of KCR lands by powerful land mafias (Daily Times, 2014).

In 2007, after recognizing the chaotic nature of growth, another master plan called the Karachi Strategic Development Plan 2020 was developed, that is being implemented to date. However a lack of planning has caused Karachi to expand in different directions. In the backdrop of the history of public transit interventions in Karachi, it is not technical issues that are of a concern. The concerns and the factors that have side-lined all efforts to have a viable public mass transit system in Karachi, are political and institutional along with a failure to develop consensus among key stakeholders – political, administrative, existing transport operators and allied industries, and very importantly the users.

Moreover, transport policies at the national level still encourage private sector involvement (Imran, 2009). Hasan and Raza (2015) state that the private sector has been unwilling to invest due to previous failures. This has caused serious implications moving forward when mass transit becomes critical in a city with rapid motorization and high population growth.

CURRENT SITUATION

Today Karachi's public transport service is mainly in the hands of the informal transport sector due to previous failed

attempts at establishing a mass transport system by the government. As a result, the number of minibuses have proliferated, which have had many fold consequences for the city. Corruption has increased, as multiple minibuses run on the same route by bribing police officials; some without permits, viciously competing with other buses for passengers. This has deteriorated the quality and safety of public transport services. Buses are ageing, drivers are uneducated and untrained, and passengers are overcrowded. Minibuses also don't conform to the traffic rules and are a major cause for traffic accidents and congestion, which has resulted in grave negative economic, environmental and health impacts.

Following the failed government interventions, the transport sector has been unregulated for many years. The sector is also losing out on profits, as fares have not increased despite rising fuel costs and the on-going CNG crises. A rise in fares is also difficult to justify in the absence of any improvements in the quality of services being provided. This has decreased the number of buses and worsened the transport problem.

The demand for transport, however, is very high in Karachi. Over 24,227 million trips are made daily and about 60% of trips are made on buses (JICA, 2012). However, public transport accounts for around 4-6% of the modal share of vehicles. This highlights the issue of overcapacity, which leads to unsafe conditions for passengers. The problem is that most people have no other choice and therefore, must use this service. Figure 1 shows the low modal distribution of vehicles as compared to their usage.

Infrastructure

Weak road infrastructure is a major impediment to the current service and all other road users in Karachi. Due to a lack of
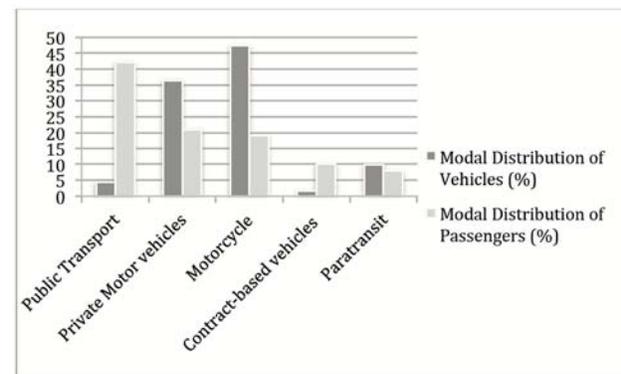

Figure-1: Modal distribution of vehicles and passengers.
Source: JICA, 2012

formal bus stops, poor road conditions and unregulated buses, the average waiting times and congestion has increased. There is also a lack of pedestrian infrastructure for people who want to walk or cycle. Safety has become another looming concern and thus discourages non-motorized travel (NMT). The overall road development is also not well connected, as many projects have been built to suit individual needs and not in respect to an overarching city plan. For example the Lyari Expressway, a controversial project that was opposed by many academics and NGO's as it displaced many people (Hasan, 2005), did not fulfill its purpose of reducing congestion (Ahmed, 2016)

Traffic Management

In Karachi the current traffic management situation allows leniency to cars to drive in any lanes, and park their cars wherever they desire. This issue was also expressed in the new Master Plan as unregulated parking frequently results in congestion (ECIL, 2007). Along with parked car, multiple hawkers providing services to passengers have also encroached upon many roads, essentially causing congestion in areas.

Response

Due to low quality service, many people are opting to buy their own private vehicle. The number of registered motor vehicles has increased very rapidly and if this growth is maintained it could result in upto 2.1 million motor vehicles by 2025, which makes it a pressing matter that can no longer be avoided (Ahmed, 2013). The Karachi Strategic Development Plan recognizes these problems and encourages investment into upgrading the current infrastructure (ECIL, 2007). Without strategic and systematic upgrades, implementing a transport system will be extremely difficult.

KARACHI'S BRT

The Asian Development Bank (ADB) has proposed to develop a BRT corridor in Karachi. ADB has provided a plan with a focus on sustainable planning to effectively target congestion and improve mobility. They aim to reorganize urban growth and promote transport oriented development concepts by integrating mixed land uses and constructing NMT lanes. They will design the BRT operational plan and business model. The BRT will run on a segregated corridor with some elevated corridors along with linked feeder routes. Intelligent transport systems will be an important feature improving reliability and speed.

ADB also plans on improving the institutional capacity of the Sindh Mass Transit Coordination Authority (SMTCA) and the Sindh Mass Transit Company (SMTC); however, these institutions are not functional yet in Karachi. Additionally, ADB also aims to facilitate traffic management, initiate an urban development strategy to reduce encroachments and strengthen the capacity of traffic police. Despite their comprehensive proposal, there is a lack of information whether they have commenced with this plan. Additionally, the Japan International Cooperation Agency (JICA) has aided the Sindh Government by conducting a feasibility study for the Red and Green BRT lines (JICA, 2012). Despite Karachi's failed transport interventions, the BRT project has surpassed expectations and has reached the implementation phase. Currently there has been a general consensus that the BRT should be implemented, despite knowing that there is absence of institutional ownership. Currently very little information is available to the public about the process and details of what is happening on ground.

Proposed

Five lines have been proposed in the system with different managements funding and operating the lines. The Federal Government is financing the Green Line, a Chinese consortium has been awarded the contract to build-operate-transfer (BOT) the Yellow Line; Bahria Town developer is financing the Blue Line which will connect the city to Bahria Town; the Sindh Government using public funds is financing the Orange Line; and ADB was supposed to finance the Red Line with the Sindh Government; however, it is unclear whether they are still on-board.

Planning

Both Sohail (2000) and ADB (2009) stress the importance of a single authority to oversee operations to ensure success. However, no single mass transit authority has been established to oversee this mega project. The bill to create a Sindh Mass Transit Authority has been submitted, but it is still pending approval (Bhagwandas, 2015). The fact that the project is being launched without any decision being taken on the Sindh Mass Transit Authority Bill raises serious concerns about the political and institutional ownership of this project and raises the fear that yet again it might fall prey to the political contestations and dysfunctional governance scenario in Sindh and Karachi. The lack of central authority is a huge issue and has been a key reason for the failure of many past interventions as most developments have no interlink to an overall city plan. Moreover, the land development authority has had very little say in the development of the plan. The

fact that the land development authority does not own all the land in Karachi is also a hindrance in the implementation of the transport plan. In the absence of an enabling institutional and legislative framework, many good plans and policies often never get translated from its conceptual phase. In Karachi frictions have always existed between the provincial and local/ city government tier of governance over control of the earlier proposed projects that has limited the proposals to design and planning phase, and hindered actual implementation.

In the past, there has been a reactive approach to tackling a crisis rather than planning ahead; hence none of the interventions have had long term impacts. Before such a massive plan gets implemented, there are some questions to consider in the planning phase that will make the transformation process easier and ensure the success of this mega project. A project of this scale has the potential to transform the landscape of Karachi and hence good planning can ensure efficiency and success of the new BRT project. A mega project built wrong can end up becoming a white elephant and serve as a strong reminder of the lack of institutional capacity and vision. Therefore the aspects that need to be addressed beforehand are:

• Do the routes disrupt any heritage or environmental sites? The environmental impact assessment indicates that some water and gas lines may be in the right of way (ROW); however, the city has not identified these and what will be done about them? Similarly, the Green Line may reduce green spaces in the city. It is not clear yet if public consultations have been conducted with the right interest groups.

• Since different institutions are financing each line, it is important to address the issues related to coordination between these institutions. It is also important to outline processes to monitor performance standards for the different lines.

• It is important to identify how many buses will each line need to guarantee reliability and to maintain speed.

• It is vital to standardize the fares and if the government will provide subsidies.

• It is also important to identify if the BRT system will affect informal and formal businesses and how will they be compensated?

• In order to plan for a sustainable mass transit mega project, nonmotorized transport facilities need to be developed

to further discourage car usage. Currently, NMT's account for 20% of the daily trips (JICA, 2012) and despite ADB's proposed plan, will the other financers also give it the attention it deserves?

• If NMT facilities are designed, such as space for pedestrians and cyclists, how will the issue of encroachment be enforced in those public areas?

• It needs to be identified if future areas have been outlined where transit links can be connected.

• It is also vital to outline how will the proposed BRT link up with other possible transit options, like the KCR.

Informal transit

ADB has also proposed that the current bus operators become the operators of the new BRT project (Ahmed, 2013). ADB will provide compensation for operators to scrap their fleet. In previous projects, the transport mafia disagreed, conspired to ruin, and competed with government buses. Their influence suggests that they have been a major opposing force when it comes to introducing any new transport initiative. Since the BRT project has passed the inception phase, one can assume some sort of deal has been made. It is difficult to comment about the extent of the involvement of the different statkeholders in the current project due to a lack of information. One of the lessons from the past has been the failure to build consensus and measures for assimilation between the key stakeholders and existing players. So it is imperative to determine whether they have been included in public consultations as stakeholders.

BRT Fares

Due to the different operating entities, it is unclear what the fares of BRT will be and whether they will be subsidized or not. The current bus fare for the informal transport sector is unsustainable because they are not making any profits (Hasan and Raza, 2015). In order to encourage more transport users and provide mobility options, variety for fare subsidies for the low-income community should be provided, as they may not be able to afford high prices. The city can perhaps have different fare choices or subsidies by using an electronic fare system. Hidalgo and Carrigan (2010) suggest that fares should be based on the actual cost of operations, as this reduces the need for subsidies. However, if the project is too expensive, the BRT fares will be expensive, leading to low ridership levels. If subsidies are provided to compensate for the need of high operating cost then the question about

the sustainability of the project arises. Hence, comprehensive planning is important in the planning phase or it may be disastrous for the city due to the losses it may incur.

The Lahore BRT project had been built using public funds (Husain, 2015). It is, however, incurring a loss of Rs. 5 million as the government is paying a subsidy of Rs. 40 per ride, while passengers are only paying Rs. 20 per ride (Express Tribune, 2014). Although the BRT project in Lahore intended to provide safe and reliable transport, while encouraging public transport usage, insufficient investment in the number of buses and bus stops has resulted in inadequate coverage (Hasan, 2014). This serves as an important reminder for Karachi because the same mistakes should not be repeated, or it will add to Karachi's list of failed transport interventions.

Institutional capacity

Another implication for the BRT is its reliance on the international agencies for intuitional support and detailed plans. This reduces the institutional capacity at a local level because they are not involved as much and hence don't take ownership of the project. Another issue that arises with foreign assistance is that they lack local knowledge of issues and experience of how things are done (Imran, 2009). Although local consultants are hired, the extent of their involvement in planning is limited (Imran, 2009) and depends on the particular agency. Most BRT systems are largely successful if there is strong political will or a leader pushing for implementation (Wright, 2005). For example, BRT in Bogota was the vision of former mayor. In Karachi, there is an absence of political will. Moreover, Imran (2009) implies that there is a serious limitation of institutional capacity due to lack of skills and knowledge to facilitate projects, because of heavy dependence on international institutions for aid and finances.

User Awareness and Public Participation

User education is very important in converting choice riders, as the main aim of the BRT is to encourage an increase in modal share. Hidalgo and Guiterrrez (2013) suggest that new systems and changes require proper user education to improve the project's perception. For example in Ahmedabad, India, planners frequently held consultation sessions with various community groups to increase awareness (NIUA, 2012). There were frequent workshops for public officials, open displays about the BRT at the local university, regular press releases and feedback from the community was highly regarded. As a result, they were able to establish a strong

brand image and clear any misconceptions before the launch of the BRT (Kumar et al., 2012). Moreover, Rizvi (2014) suggests that updating and educating the public during the initial phase yielded much better results and eased future implementation difficulties. For Karachi's BRT project, there were some public consultations, but very little information is available on who was present and the extent of engagement of the stakeholders. There have been regular press updates on the project, however, due to lack of user awareness, many people may not be following the project.

LESSONS FROM OTHER CITIES

Drawing lessons from other cities may aid Karachi in improving the current project's viability. BRT systems need to be designed keeping local travel demand and context in mind. Although the cities used for comparison have different set of actors, stakeholders and planning processes, some specific aspect of their process maybe useful. From Johannesburg, one can see the process of how the informal transport sector was integrated into a more formal sector. From Ahmedabad, one can learn more about their governance structure and find ways to strengthen Karachi's institutional capacity.

Case Study 1

Ahmedabad, India

As one of the fastest growing cities in India, Ahmedabad needed a mass transportation system to support its city. In 2012, Ahmedabad's number of registered vehicles doubled from 120,000 in 2001 to 280,000 (Embarq, 2014). Current buses were running under the Ahmedabad Municipal Corporation, but due to a lack of resources and operation inefficiencies, the system was failing, resulting in decreased patronage (NIUA, 2012). The city therefore, proposed the BRT system to address the rapid rate of motorization and decline in public transit usage.

Desire for Change

The government expressed their interest in improving their transport systems. So during the "Year of the Urban Development" the Gujarat Infrastructure Development Board and the Ahmedabad Urban Development Authority conducted a comprehensive mobility plan to improve mobility needs by proposing a BRT system (NIUA, 2012). The BRTS was the result of strong leadership shown by Mr. Gautam of the Ahmedabad Municipal Corporation (Rizvi, 2014), early-informed decisions, and support from their local university,

that is the Centre for Environmental Planning and Technology (CEPT) and Institute for Transportation and Development Policy (IDTP). The city coordinated and communicated well with various stakeholders, carefully considered local context in many of the design phases and utilized the given feedback.

Planning Process

The planning of the BRT was given to CEPT University and they were very thorough in their findings and analysis in proposing solutions (Kadri, 2010). They incorporated a transparent approach in sharing and discussing each step using media and other consultation tools (Rizvi, 2014). The project was aligned with national goals of discouraging the use of automobile dependence and received funding under the Jawaharlal Nehru Urban Renewal Mission (JNNURM) (NIUA, 2012). They focused on 'designing a network and not corridor' and 'connecting busy places but avoiding busy roads' (NIUA, 2012; Rizvi, 2014) and introduced new cycle lanes and footpaths, which did not exist before. To streamline operations and improve accessibility, over a hundred minor design modifications were made (Rizvi, 2014). The design process also included international visits to other cities with successful BRT systems and CEPT relied on lessons from Delhi and Pune to avoid repeating mistakes (Rizvi, 2014). The case study of Ahmedabad serves as an important lesson for Karachi as it can reflect upon the issues encountered in the design of the BRT in Lahore and Islamabad.

Janmarg

Janmarg (meaning "the people's way") was created as a new authority board to plan, design and manage the BRT system in Ahmedabad. It had a strong institutional framework to execute the vision in order to improve Ahmedabad. The new authority included figures such as the mayor, traffic police commissioner, members of political parties, transport specialists and private investors (NIUA, 2012). This mix of people from different backgrounds and skills allowed them to lead an autonomous system. Key responsibilities were demarcated under three divisions (Figure 2).

These divisions worked on their own tasks, but coordinated with each other. The planning department under the operations division was an important department, which conducted passenger surveys, did long-term planning, assessed possible extensions and developed fare structures and business models for the operation management teams.

Policy Evaluation

Janmarg has been quite successful in achieving what it was planned for. The project was inaugurated in 2009 with three months of free ridership to smooth over difficulties and create a positive image. Fare costs ranges are from Rs. 2 to 14 depending on the intended distance. The authorities were also able to minimize adverse environmental effects and decrease waiting times (Embarq, 2014). Another important result was that *Janmarg* encouraged lots of women to travel, thus increasing accessibility (Embarq, 2014).

There were however some issues with the BRT system in Ahmedabad. The fare structure was still too high to encourage travel for low-income residents, NMT's were poorly designed and there were delays with the fare-card system (Rizvi, 2014) (Figure 3).

Furthermore, the BRT system of Ahmedabad also did not connect well to feeder routes and other buses in Ahmedabad. However, Janmarg worked hard to ensure all issues were sorted out as soon as possible.

Case Study 2

Johannesburg, South Africa

Rea Vaya (meaning 'we are going'), launched in 2009 is an example of strong political leadership to ensure the implementation of the first successful government transport intervention in South Africa. *Rea Vaya's* success lies in its dealing with the informal bus operators and turning them into formal operators to provide trunk and feeder route service (Schalekamp and Behrens, 2010). There were two main reasons why they were successful. Firstly, government intervention was effective due to the government's
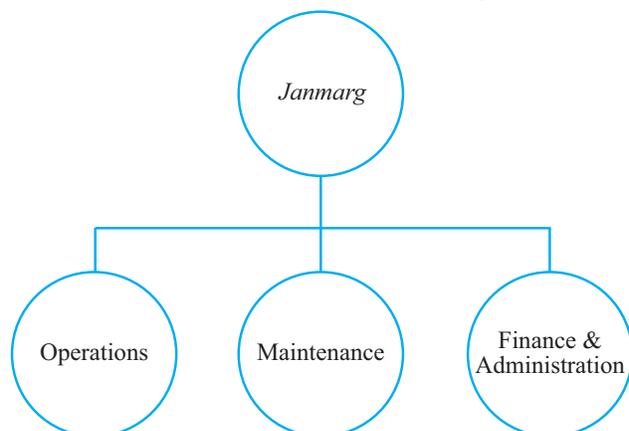

Figure-2: Governance structure of BRT in Ahmedabad, India.

commitment in taking majority of the risk and the informal sector's inclusion in stakeholder sessions to formalize their arrangement. Venter (2013: 118), also argues that the government was also successful because the proposal they offered was attractive and feasible due to a stagnant technological- economic reality. The BRT system included large buses that were technologically advance and could achieve much higher speeds due to segregated roads. BRT operators were paid a fee per bus per km, regardless of passenger numbers, which reduced competition amongst other drivers (Venter, 2013).

Context of Rea Vaya

The implementation of *Rea Vaya* in Johannesburg was by all means not an easy feat, as general mistrust was high. Very similar to Karachi, transport was de-regularized in 1988, giving way to an expansion of the minibus-taxi industry. The informal transport operators responded to demands and penetrated deep into the system becoming quite powerful. Competition amongst drivers grew and associations fought over lucrative routes. The associations would often settle disputes using violence, as the police did not enforce or monitor their activities, which resulted in the drop of safety and quality of service (Venter, 2013). With time the size and influence of mini taxi operators had grown considerably and it became the main public transport provider, as 60% of the population used these minibus taxi services (Berg, 2010). Although previous government interventions were unsuccessful in regularizing the industry, the government was serious in its attempt to formalize it in the case of *Rea Vaya*.

Process towards formalization of Rea Vaya

The city conducted many stakeholder sessions to include the taxi operatives that would be affected in phase one. Securing trust was difficult, but the parties finally reached a decision. The city intended to merge existing operators into the new system and provide driver training. They also required existing operators to remove their vehicles from the routes of *Rea Vaya*. There was uncertainty from other taxi operators and drivers who were not included in the process, but they were not directly affected by the BRT. Before the system was launched, there were threats of strikes and violence. The city reaffirmed that no jobs would be lost and all affected people would be compensated. There were court orders to stop the BRT, which increased the project's uncertainty. Once the system started, the number of passengers grew, and there were fewer glitches. Four months in, there was a shooting as a gunman fired on the bus. This resulted in the deployment of security forces to guard the BRT system (Venter, 2013). Despite all the issues, the system today is working well.

POLICY EVALUATION	
Positive	**Negative**
Decreased travel time (operation efficiency)	Mostly used by largely the middle-income group, with monthly incomes between Rs.10,000- and Rs. 40,000/-
Decreased personal motorised travel (travel behaviour)	24.4% of females use the new bus system and out of that only 6% use it for leisure purposes
Increase in public transport patronage (more market share, from October 2009: 17,315 to October 2011: 135,000)	Yet an expensive option for the low income group
Increased local economy (especially along the corridor)	Only 13 per cent of commuters have shifted from private motorised vehicles
Reduction in accidents	Too top-down transportation planning approach
Improved air quality	Poor integration of other modes (walking, cycling facilities, shared auto rickshaw, public bus)
Increase in social trips (after six month operations)	

Figure-3: Policy evaluation of BRT system in Ahmedabad, India.

IMPLICATIONS FOR KARACHI'S BRT

If one looks at the present BRT experience, it is feared that despite all good intentions, the similar mistakes of the past are being revisited. There is a complicated set of financers, administrators, operators belonging to a diverse set of political/ private, donor sector, etc. In the absence of any clear information or future status of the Sindh Mass Transit Authority Bill, it is not known how this complex web is going to be structured, find synergy and deliver on multiple aspects of implementation, operation, financing, monitoring and regulation. There are only vague statements that existing transport operators are going to be assimilated in the proposed BRT but no clear road map or detailing as to how this will be done. Public participation and user awareness has been limited to a few seminars targeting a limited set of stakeholders that may not be public transport users anyway. There is also no public campaign for information dissemination and user awareness. There is a lack of clarity on the affordability aspect, and maintenance of performance standards, which is critical to the success of any public transit system. These issues need to be looked into and brought more intensely in the public discourse as these factors have defined the fault lines that have derailed all past transport related interventions.

Government interventions in Karachi have failed to not only regularize the informal sector, but also in competing with them. Buses in Karachi are not able to improve technologically, as they have reached their mature phase, like the minibus-taxi in South Africa. Hence there is the possibility that the informal sector might be open to new ideas. In Hasan and Raza's (2015) study, the informal sector implied that if they were given new buses, they would be able to function much better and meet the increasing demands. The informal sector has the technical experience in running the transport sector, along with local knowledge of where the most demand is and where feeder routes are needed. As the present Karachi BRT is concerned, there is a high level of ambiguity as to how the present transport operators are being engaged and integrated in the current plan.

There are many lessons for Karachi from Ahmedabad's institutional framework as well. Each division within the new authority has roles for everyone and there is a focus on coordination and communication between the divisions. Perhaps a new authority in Karachi could also include different stakeholders without any political ambitions and understand that transport based mega projects is an important and much needed service.

Another interesting point to learn from the Ahmedabad case study was the use of local university and local consultants to plan and design the BRT. This helped strengthen local institutions, facilitate research into further BRT areas and spur growth in the economy. It also meant less reliance on foreign interventions.

CONCLUSION

As this paper has highlighted, that other than external factors such as phenomenal rise in population levels, a lack of implementation of planning recommendations and rapid decline in the capacity of urban planning and development institutions since the 1950s has caused Karachi to grow in a sporadic manner, which has had many negative social, political, environmental and economic consequences. The result of unplanned growth has further exacerbated the already existing need for an adequate mass transit mega project. Historically, in assessing the direction of transport policies, more focus has been on road-based projects that cater to the private automobiles and not enough research, funding and priority has gone into public transport projects. Therefore, it becomes crucial to identify and address the pressing challenges associated with planning and delivering mega projects, as they have the ability to transform landscapes. Within this context, a strong institutional framework, backed by political support that can come in the form of an appropriate policy and legislative framework, is very important because it can enable, or if there is a lack of it, constrain transport service delivery. It therefore, comes as no surprise that a lack of political will and institutional capacity in Karachi has caused many plans to fail. Plans have failed to have the required political sanction, and few people locally have had the technical capacity to manage and implement such mega projects. Despite this, even now, in the case of the BRT, most of the discussion and focus has been on the technical merits and demerits of the project and not enough focus on the political, institutional and public legitimacy.

In evaluating the current BRT project's viability, it becomes clear that factors that have derailed former transport projects need to be addressed by policy makers. More transparency and knowledge sharing is required as educating the public will increase positive perception and give projects the required public legitimacy. Researchers should be encouraged to identify major and minor issues that can be rectified before the BRT is implemented. There needs to be an emphasis on facilitating a greater role of local universities, research and development institutes, and consulting organizations to conduct further research in different aspects

of transport and city planning and as such, strengthen local capacity. More public consultations with interest groups and transport users are needed to understand what modifications are required. In addition, there is the critical requirement of working with the ground realities and that means the existing operators catering to the mobility needs of the potential public transport users. Unless a roadmap is charted to define a new role for the stakeholders in formalized systems of public mass transit, there will always remain fears on the sustainability of the proposed initiatives. The much needed public consultations will aid the government officials in achieving consensus amongst key stakeholders and eventually result in smooth implementation of the project.

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THE MAJESTIC MONUMENTS OF LAHORE
### *Anjum Rehmani*
A Publication of Oxford University Press

A Review by Rabela Junejo*****

The Mughal-era architecture of the city is studied as a manifestation of its culture through the centuries. Anjum Rehmani's book is a befitting eulogy to Lahore, the quintessential Mughal city, and its architecture. *Lahore: History and Architecture of Mughal Monuments*, however, is neither lyrical nor poetic. On the contrary, it is a very well-researched volume referenced with supporting photographs. Structured chronologically, the book traces the origins of Lahore as far back as is possible based on available literary and material sources. Chapters are arranged in sequential order from early, classical and late Mughal times, with a brief look into pre-Islamic and pre-Mughal episodes. Architecture is examined through a spectrum of building types erected under the patronage of various sovereigns and their appointed governors.

The title here becomes slightly misleading as the book sheds light on people, culture, society, religion and historiography, laying a firm ground for a context where architecture breathes and blossoms. Architecture being a "valuable historic document" through agency of which the past is recreated, takes centre stage in the writing. Written like a monograph, the book does justice to the prolific builders that were the Mughals, and the brick, stone and marble aesthetics they brought to the region.

As copious as the number of monuments is the length of the book — spread over more than 400 pages, one ends up browsing page after page consuming information about gates, forts, tombs, mosques, gardens, hammams and *havelis*. This volume certainly adds to the scholarship that exists in Pakistan on the subject of heritage and history. The academic and service background of the author as director of the Lahore Museum serves the book well, as many non-generic resources are brought to light. Hence, it becomes an important resource in itself for young academics and researchers, and a history lover like myself cannot help but pause and look at the notes in the end for answers.
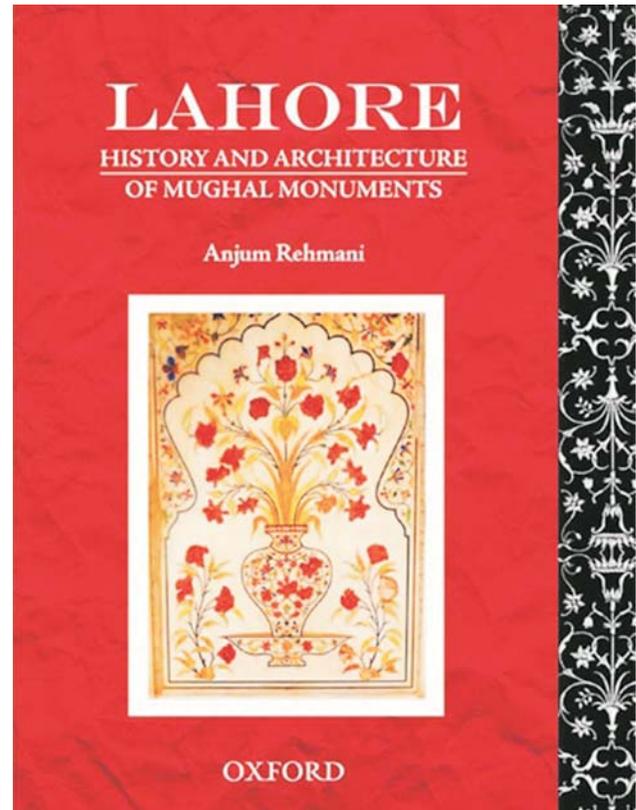
"One who visits Lahore always yearns to return to Lahore", "*Lahore Lahore ae!"* Sayings like these start the narrative in the first chapter where the author makes use of popular slogans and anecdotes to set a rather light tone for the book. From here, though, delves into the realm of literary evidence. As one progresses, the author's strong grasp of the subject matter becomes evident. In the very first chapter Rehmani writes, "Since Sultan Mahmud had come to Lahore to rule permanently, not to quit it after conquest; he formulated a policy of reconciliation to win the hearts of his Hindu subjects. Furthermore, he wanted to ensure simultaneously that these Hindu subjects should feel that his government was their own", rejecting the popular notion of Sultan Mahmud as an anti-Hindu destroyer of temples.

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For a scholarly work like this it is important that sources speak for themselves and popular propaganda is questioned and challenged in the light of material evidences. It becomes clear that policy matters adopted by the rulers were sensitive to the populace and Akbar was not the first one to reconcile the differences between Hindus and Muslims, provided there were any. As early as Mahmud's time, Lahore fostered tolerance where "Persian and Arabic were current alongside Hindi and Sanskrit … *devanagari* script alongside that of *naskh* and occasionally *kufic*".

The focus, however, is on the Mughal period and corresponding monuments. Lahore became a flourishing city during the Mughal time and remained the seat of the empire for many years, a city at par with Delhi and Agra at the time. Mughals brought with them a taste for gardens designed in the *chahar bagh* manner, bringing a Persian sensibility to the region. "Jahangir and his empress Nur Jahan both fell in love with Lahore … Nur Jahan's stay in Lahore, in particular, caused a revolution in the city's social and cultural life, transforming it into almost a blueprint of her native Iranian society and civilisation. She devoted much attention to the development of landscape architecture in Lahore; laying out in Shahdara her garden, the Bagh-i-Dilkusha, where Jahangir was later buried, and *chahar chaman* where she herself was laid to rest". Such was their love for the city they built and nurtured, that they chose it as their final abode.

The most growth took place during the times of Akbar, Jahangir and Shahjahan. Babur, Humayun and Aurangzeb also contributed to the city, but not on the same scale. "Lahore began to flourish under Ghaznavid rule (1021-1186). It declined in the era of the Sultans of Delhi. The city rejuvenated when the Mughal prince Mirza Kamran was the governor of Lahore (1530-1540), and continued to progress physically and culturally in the times of emperors Akbar, Jahangir and Shahjahan. During the reign of Emperor Aurangzeb Alamgir, however, it began to deteriorate." The length of chapters narrating contributions during different periods reflects the same; the description of work done by Akbar and Jahangir is spread over two chapters each, while Shahjahan takes the lion's share of six chapters.

Although during Shahjahan's time Lahore was no longer the imperial seat, being his birth place it held a special place in his heart and these six chapters are proof of the interest he took in building and developing Lahore. "His fondness for the city found expression in the various visits he paid it after becoming emperor. During each visit, his devotion and generosity found ways to bestow on the city magnificent buildings, palaces, hammams, serai, etc. Amidst this overall development of the town, official emphasis was on the expansion of the Lahore Fort."

Like Shahjahan, for building activity the Lahore Fort is the focal point and gets a separate chapter and sub-chapter in each period presented with the minutest details; it makes up almost one fourth of the volume. This progress during the golden period of the Mughals attracted migrants from all around the empire, increasing the diverse cultural milieu of the city. These migrants and settlers added to the city's already flourishing architectural repository.

The linear chronological narrative of the book assists in conjuring up step-by-step images of the progress and decline of the city. The information provided facilitates an understanding of Lahore and its architecture for all and sundry. The details of the historic background of people and places, city layouts, materials of construction, structural techniques, etc., all are recounted with extensive excerpts added to the text.

At this point one is left with a longing for analytical depth and synthesis, for although much breadth of information is presented, analysis falls short. There are comparisons between Mughal buildings and their predecessors, but these are rare. The conclusion, too, basically summarises the preceding chapters, with analysis as though an afterthought. This volume, therefore, is more information-centred, but what has been collected is immense. It can be a point of departure from a diachronic study into a more analytical synchronic effort for future academics and scholars. Given the state of archives in our country, and how difficult it is accessing any resources, this undertaking by Rehmani conserves effort by pointing scholars in the right direction.

The graphics are slightly disappointing for this time and age of high resolution cameras and easy availability of digital tools. The drawings could have easily been digitised for a finer, crisper outcome. Whatever constraints the author may have had, the lopsided and distorted images and scattered composition are not easy to overlook. The contemporary photographs defy the grand descriptions of the structures, but the state of conservation of the monuments is also given. This contrast between text and photographs leaves great room for mentally filling the gaps; converting words into images.

This piece of scholarship sheds light on Babur's nostalgia for the terraced landscape of Central Asia, Humayun's political struggles, Akbar's strategic tolerance for all religions,

and Shahjahan's love for his birth place, evident in the architecture and city planning of their reigns. Architecture is presented as an outcome of all that happened around and within Lahore socially, politically, culturally and otherwise. In writing about history, roles are often reversed and architecture acts as the marker for the very social, cultural, political and religious milieu that produced it. The longevity of architecture is exploited well in the book; it is celebrated as the very agency and aid through which the context and culture of the past are recreated. This volume is as much about the architecture still standing, as it is about the people who made it a reality, and left imprints for the likes of Rehmani to structure the sum of parts into a seamless narrative.

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