Policy Brief

EXPLORING AND ANALYSING THE DRIVERS OF URBAN SPRAWL IN PAKISTAN: A CASE STUDY OF LAHORE

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INTRODUCTION

The twentieth century and the first two decades of the twenty-first century have witnessed a dramatic increase in the global population and its unprecedented concentration into urban areas around the globe. It is estimated that cities occupy nearly four percent of the global land, yet they host half of the world's population, swallow nearly 80 percent of natural resources and contribute more than 75 percent to pollution and wastes, which are hazardous to health. This unparalleled urban sprawl is one of the major and serious global challenges currently faced by both the developed and the developing countries because it requires sufficient land for residential, industrial, commercial, and public services (e.g., schools, hospitals, roads, etc.), which generally consumes precious cultivable land surrounded by a city or an urban area. So, this unplanned urbanisation normally with low population density grows at the peripheral regions of the city.

Rapid urban growth is a worldwide phenomenon and Pakistan is no exception to it whose growth rate is around 2.7 percent, which is considered very high. This is manifested from the fact that its urban population between the first census (1951) and the last census (2017) has increased from 17.7 percent to 36.4 percent. This expansion of the cities is taking place outside their municipal boundaries, which is validated by the fact that the urban growth in the country has encroached upon 77,000 hectares of agricultural land between 2000 and 2010—most of it was prime agricultural land. This pattern of urban expansion outside the boundaries of the municipal corporations is posing serious threats to the capacity of providing basic amenities of modern life and is hazardous to sustainable growth. It is leaving multiple impacts on the environment, economy and society. The plight of Pakistan's most populated cities – Karachi and Lahore – is reflected from the Mercer Quality of Living Index of 2016, where Karachi and Lahore are ranked 202 and 199 respectively out of 230 cities.

Lahore, the second-largest city of Pakistan, hosts 11.12 million people in 1.758 million houses in an area of 1,772 square kilometers and has a population density of 391 persons per hectare. Further breakup of population density shows that about 10 percent of the area of Lahore city has an average population density of 860 persons per hectare while the rest of 90 percent area has relatively lower density of 400 persons per hectare. The percentage of low density areas has increased from 48 percent to 58 percent, the percentage of medium density and high density has decreased from 36 percent to 34 percent and from 16 percent to 8 percent respectively between 2005 and 2015. This implies that Lahore is experiencing rapid urbanisation, which is manifested from the fact that Lahore's annual average urban extension rate went up from three percent between 1991 and 2000 to nearly four percent between 2000 and 2013 while world's average urban extension rate declined from 6 percent between 1991 and 2000 to nearly 4 percent between 2000 and 2013. This tells one of several stories of urban sprawl in Lahore.

The foregoing debate raises an important puzzle: Whether bureaucracy is responsible for urban sprawl in Lahore? If yes, how?"

METHODOLOGY

Research methodology for this research project is divided into two parts i.e. methods for data collection and methods for data analysis.

Methods for Data Collection

The question was answered by collecting data (e.g., regulations, zoning codes, policies, and master plans for urban development and statistics about population, density, households, urban area, and vehicles) from the records of various government departments and organizations (Lahore Development Authority—LDA, Metropolitan Corporation Lahore—MCL, Defence Housing Authority—DHA, Lahore Cantonment Board—LCB, Cooperative Housing Societies—CHS, Tehsil Municipal Administration—TMA, Local Government—LG, Statistical/Census Department, Excise and Taxation Department, the Punjab Urban Unit, etc.), public and private real estate developers and international organisations (World Bank—WB, Food and Agricultural Organisation—FAO, International Monetary Bank—IMF, etc.). In addition to this, long and recurrent discussions were held with the urban planners and analysts, senior bureaucrats who had worked in Lahore during their service/employment, officials from the Urban Unit, LDA, MCL, DHA, LCB, CHS, TMA, and LG, and public and private real estate developers.

Methods of Data Analysis

The collected data was analysed through directed content analysis—one of the three distinct techniques of qualitative content analysis; the other two are summative and conventional. In the directed technique of content analysis, the academics start their research from an already existing theory or prior research findings, with a goal of rejecting, validating or extending it. This method is categorised as a deductive use of theoretical conception or research findings. This research project aimed at testifying the findings of a host of urban policy experts/analysts who hold that bureaucracy – which plays a key role in devising and implementing master plans, policies, zoning codes, and regulations – is one of the leading actors who are causing urban sprawl in Lahore. Interestingly, the findings of this research project, as is evident from the concluding part, endorse their standing.

FINDINGS

The findings of this research project are divided into two parts: the first deals with the measures to gauge urban sprawl in Lahore while the second explores and analyses the role of bureaucracy in urban sprawl in Lahore. Following are the findings of measures gauging urban sprawl in Lahore.

Conversion of a Large Amount of Agricultural Land to Urban Development

There has been a rapid conversion of large swathes of agricultural land to urban development in Lahore, causing swift increase in the number of housing societies – many of which as gated communities – at the outskirts of Lahore. As a result, there was a massive expansion of real estate market in the city particularly since the 1990s. The whole process was resulting in extensions of the scattered housing societies on the one hand and vacant plots on the other.

Population Density

Population density is high at the center and it starts decreasing with the increase in distance from the Central Business District (CBD)—the city center (Gulberg). The density within the radius of 14 kilometer of the CBD is more than 150 persons per hectare while it is less than 150 persons per hectare beyond 14 kilometers. In the same vein, 24.38 per cent, 59.13 per cent, and 16.49 per cent of the total population is residing within the radius of 0–5 kilometers, 5–14 kilometer, and

14–38 kilometer from the CBD, respectively. High density in the center and low-density at the peripheral areas suggest that the city is sprawling on its fringes.

Built-up Area Density

584.20 per cent population increase whereas 584.20 per cent built-up area increase between 1966 and 2017 clearly indicate urban sprawl in Lahore, where the percentage of built-up area growth was more than percentage of population growth.

Patterns of Development

The initial growth of the city was circular within a radius of 0–5 km. From 1980 to 2000, the pattern of urban growth was contiguous within the radius of 15–20 km, whereas during the last couple of decades, the growth pattern has turned into radial-cum-linear that is scattered at periphery attaining the form of multi-nuclei city. In other words, rapid but scattered growth has occurred along its major arteries i.e. Raiwind Road, Ferozpur Road, Grand Trunk Road, and Multan Road/Canal Road up to the radius of 20–35 kilometer.

Single Land-use Zoning

Lahore has been practicing land-use zoning codes and building bylaws which encourage single land-use zoning, single-family home, and horizontal expansion on the one hand whereas discourage mixed-use zoning, multi-family homes, and vertical growth on the other—high rise buildings are banned for commercial and residential use). Therefore, Lahore does not have a downtown or city center—the dense areas with mixed-use buildings (residential, office, commercial, and entertainment) within an almost walkable reach. Subsequently, it is falling victim to urban sprawl.

Accessibility and Modes of Transportation (The Auto-Dependent Landscape)

Lahore's existing public transport system is insufficient to meet the travel demand of the peripheral residents. Consequently, the demand for personal cars and private vehicles (mainly two-wheelers) despite price hikes, supply chain hiccups, economic recessions, and other issues, has been surging. The rise has been exponential, especially in the previous few years. According to Pakistan Economic Survey (PES), approximately 1,977,704 cars got registered between 2012 and 2021; out of which, 812,204 were registered in Lahore only. Whereas, during the same period, 4.2 million vehicles (cars, two wheelers, and three wheelers) were registered in Lahore, according to the Motor Registration Authority of the Punjab Excise and Taxation Department.

Our research findings identify that Lahore's urban expansion has been a mess, the city has been sprawling. There are multiple factors for this unwanted urban sprawl yet bureaucracy is leading from the front as is evident from the following facts and figures.

Absence of a Single or Central Regulatory Body

The administration of Lahore city is fragmented, comprising the Lahore Development Authority (LDA), the Metropolitan Corporation Lahore (MCL), and the Lahore Cantonment Board (LCB) and the Defence Housing Authority (DHA). Apart from this, other institutions that are involved in housing development specifically are the Cooperative Housing Societies (CHS) and the private sector. Therefore, Lahore is governed by a combination of various local, provincial, and federal agencies that undertake a variety of responsibilities, from urban growth management to infrastructure development, and maintenance to creation of new towns. These multiple agencies, instead of strengthening, weaken the governing structure owing to the overlapping responsibilities and administration areas.

Public Policy for Land Use Zoning and Building Bylaws

Generally speaking, there are five ways through which inefficient use of land is ensured or guaranteed, which, in turn, eats up a large chunk of land for minimum accommodation and causes

sprawling in Lahore: 1) the "Garden City" approach; 2) land use zoning—single land-use zoning is preferred over mixed land-use zoning, and building bylaws—horizontal expansion over vertical development is preferred; 3) sprawled houses and offices for civil servants, judges, and army officials in the city center; 4) prime state land reserved for stadiums, training academies, and other luxuries; and 5) gifts of land for government officials in new developments.

Taxation Policy for Land Development and Real Estate

Current taxation policy for land development and real estate favours land developers and real estate tycoons. This, in turn, causes sprawl. For example, in most of the schemes in Lahore, more than half of the plots are inbuilt because bylaws are very flexible and owners of vacant plots have no fear of cancellation and they consider this investment a better safeguard against inflation. Moreover, speculators invest their money in the plots because no cost/taxes are involved in the keeping of vacant plots. Contrary to housing properties, commercialization is heavily taxed and the process is complicated.

Transportation and Road Network Policy

Primarily, automobiles are permitting access to remote areas and providing the essential condition which allows sprawl to occur. The use of cars and two-wheelers has been facilitated at the expense of other forms of transport such as bicycles, walking, taxis, and buses. With cars and two-wheelers so subsidized, it is not hard to see why the sprawl is spreading.

CONCLUSION

Findings of our research project lead us to conclude that conversion of a large amount of agricultural land to urban development, high population density and low built-up area density, patterns of development, single land-use zoning, and poor accessibility and modes of transportation (the auto-dependent landscape) clearly indicate that the city of Lahore is sprawling. This sprawl is caused by many actors including bureaucracy, which – through fragmented, complexed, and overlapping city administration; public policy for favouring single land-use zoning, single-family home, height restrictions both on residential and commercial buildings; restriction on maximum use of land for commercial purposes in residential colonies; personal interests and benefits in land development; taxation policy for land development and real estate favouring land developers and real estate tycoons; and auto-mobile based transportation and road network policy – is playing vital role in causing urban sprawl in Lahore.

KEY POLICY RECOMMENDATIONS

Following are the key policy recommendations to, at least, slow-down, if not overcome the menace of sprawl in Lahore.

Absence of a Single or Central Regulatory Body

There is a dire need to constitute a single central regulatory body or authority to govern urban growth management, infrastructure development, maintenance, and creation of new towns.

Public Policy for Land-Use Zoning and Building Bylaws

Public policy supportive to mixed or multiple land-use zoning (i.e., maximum use of land for commercial purposes in residential colonies), multi-family home, and lifting height restrictions both on residential and commercial buildings (preferably vertical development over horizontal expansion) may discourage urban sprawl in Lahore. Coupled with this, the "Garden City" approach, sprawled houses and offices for government officials in the city center, gifts of land for

government officials in new developments, and reservation of prime state land for stadiums, training academies, and other luxuries, should not only be discouraged but strictly prohibited.

Taxation Policy for Land Development and Real Estate

Heavy taxes should be imposed on vacant plots to enhance built-up area density and discourage speculators to invest their money in the plots, and subsequently, overcome the menace of urban sprawl.

Transportation and Road Network Policy

Authorities should revamp transportation and road network policies to lesser the access to remote areas mainly through private cars and two-wheelers. Instead, the use of bicycles, walking, taxis, and buses should be promoted.