

Drivers of Unfettered Urban Sprawl in Pakistan

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ABSTRACT

Urban sprawl is a global concern, however, developing countries are failing to effectively overcome this problem. For instance, in Pakistan, urban development policies are tenuous and urban areas remained without certified boundaries. This failure is mainly causing an unfettered sprawl in major cities of the country. An alarming fact is that most of the urban sprawl is consistently taking place on fertile agricultural land in the peripheries of cities. The researcher has verified the problem through literature and by supervised classification of the satellite imageries to specifically verify growth of Peshawar city. This research contributed to unveil the fundamental causes of the unrestricted urban sprawl and its aftereffects in the context of Pakistan. Finally certain reforms and techniques are suggested to curb leapfrogged and low-density haphazard growth of cities.

KEYWORDS

Housing Societies, Loss of Agriculture Land, Migration and Intensification, Urban Sprawl

1. INTRODUCTION

Worldwide urban areas have been characterized by sprawl, however, developed countries succeed to overcome this problem through better management practices and policy options (OCED, 2018; Jiang, 2016; Habibia & Asadi, 2011). It is believed that cities are inclusive units; they have to accommodate people choosing these places to live in. Therefore, it is inevitable for cities to grow with the passage of time as per its population increase. However, cities never grow in a planned manner (i.e., vertically or at appropriate direction) but rather sprawl on prime agricultural land in Pakistan. Sprawl is dissimilar to urban growth as sprawl is a form of urban expansion that is unplanned and unsustainable (Sinha, 2017) brings miseries and environmental degradation (Gordon & Richardson, 2000). Yin and Sun, 2007 described that urban sprawl has been the cause of many environmental problems in cities of United States before 1960, until they adopt Growth Management Program for cities. Galster et al, (2001) labelled poor planning and weak governance procedures for sprawl of cities across the US. However, Fulton et al, (2001) declared that population increase and sub-urbanization intensified land consumption relatively in cities of various countries. Most often government policies, institutional strength and adherence to development plan, work to discourage sprawl. Lopez and Hynes, (2003) described that migration and natural increase influence population growth and it concurrently caused change in land consumption earlier in US cities.

The streaming of immigrants and amalgamation of contiguous towns/villages into cities is a continuous phenomenon of contemporary urbanization in developing countries (Kugelman, 2013;

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2014). This process has caused a consistent increase in urban sprawl and loss of agriculture land. Angel et al., 2011 estimated that in the year 2000 global urban land cover was approximately 0.6 million km², while it is projected that it will cross 1.25 million km² by 2030. Considering the continuous rise in unmanaged urbanization and proliferation of cities, it is expected that by the year 2050 urban land cover will cross the figure of 2 million km² (Angel et al., 2011).

Various United Nations (UN) reports indicated that in 21-century the countries whose majority were rural would become predominantly urbanized (Kugelman, 2014). Pakistan is projected to cross this limit in 2025 to be called more urban and according to current projections, this will have risen to 70 percent by 2050 (World Bank, 2006). This phenomenon would further intensify sub-urbanization, agglomeration and the formation of hyper cities. No doubt urbanization brings prosperity and development, if it is properly planned. In this context managed urbanization is an essential prerequisite for development, as no country in the World has developed without encouraging planned urbanization (Nadeem Ul Haque, 2014). There is a direct correlation between urbanization and the GDP of a country (Sardar, 2012; Nadeem Ul Haque, 2014). Hussain and Tahir, 2014, verified that if a country succeeds to better manage its urban areas, then it will always enjoy lower cost of service delivery per capita, to keep providing better living conditions and better opportunities for personal happiness and economic accomplishments. However, uncontrolled urbanization is inversely proportional to the standard of living as witnessed in the cities of developing countries. It has been the cause of failure for various efforts of the government agencies to improve its urbanities.

It is of grave concern that urban growth is almost unplanned in Pakistan. There exists no policy for urban management and have no certified boundaries for cities. Urban centers have grown consistently without any land use plan and control. Consequently, urban sprawl most often progressed on the fertile agricultural land contiguous to cities. This is an unsustainable development pattern. The goal of this research is to highlight the causes of unfettered urban sprawl and to encourage urban planning to ensure urban land management in the future. It is an admitted fact that poor governance, the nonexistence of land management policy and ineffective urban planning intensify the migration of masses towards cities. Therefore, population increase, and boundary expansion is become a permanent feature of cities in Pakistan. The significance of this research is to highlight that, metropolitan cities are on the way to sprawl further and further and have no sign to stop at a certain point in Pakistan. Finally, this research recommends various policy options along with effective urban planning techniques to prevent further sprawl of cities in Pakistan.

2. RESEARCH DESIGN

This research is initiated to identify the real causes behind the unfettered urban sprawl in Pakistan. In order to understand the phenomenon of urban sprawl (in the context of South Asian countries) verification from various UN reports and individual research was carried out to grasp the problem. Thereafter, metropolitan cities of the country's four provinces were selected to study its population growth rate and spatial expansion from the literature. Official census reports were mainly used to investigate population growth rate. While the migration record is established through literature and Social Welfare Department as well as UNHCR official record for the various events (The war of 1971; The Afghan refugees and the internal unrest due to militancy) occur in the history of Pakistan. Urban expansion of the selected cities (Karachi, Lahore and Quetta) was verified from literature. While the case of Peshawar city was practically verified through GIS analysis of the archive images of 2010 and 2020. The CA Markov model was used to predict the future land use and land cover change detection for 2030. This analysis helps to quantify the loss of agricultural land into urban sprawl in Peshawar city. To ascertain its causes certain important factors were verified such as rampant construction of housing schemes, internal and external migration towards the city and its boundary extension towards its periphery.

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