



# Urban growth and development of contemporary neighbourhood public space in Kathmandu Valley, Nepal



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## ABSTRACT

Rapid and unplanned growth of Kathmandu Valley towns over the past decades has resulted in the haphazard development of new neighbourhoods with significant consequences on their public space. This paper examines the development of public space in the valley's new neighbourhoods in the context of the current urban growth. A case study approach of three new neighbourhoods was developed to examine the provision of public space with data collected from site observations, interviews with neighbourhood residents and other secondary sources. The cases studies consist of both planned and unplanned new neighbourhoods. Findings reveal a severe loss of public space in the unplanned new neighbourhoods. In planned new neighbourhoods, the provision of public space remains poor in terms of physical features, and thus, does not support community activities and needs. Several factors, which are an outcome of the lack of proper urban growth initiatives and control measures, such as an overall drawback in the formation of new neighbourhoods, the poor capacity of local community-based organisations and the encroachment of public land are responsible for the present development of neighbourhood public space. The problems with ongoing management of public spaces are a significant issue in both unplanned and planned new neighbourhoods.

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## 1. Introduction

Kathmandu Valley, the major cultural, economic and political centre of Nepal, has witnessed a significant level of growth of its towns over the past decades. Following the political change of 1951, the Kathmandu Valley was opened to migration from other parts of the country and exposure to globalisation (Basyal & Khanal, 2001; Shah & Pant, 2005). This paved the way for the development of physical infrastructures, including the construction of major highways. As migration, which is an outcome of improved mobility, exerted considerable pressure on urban growth, the valley's urban landscape began to transform dramatically since the 1960s (ICIMOD, UNEP, & Government of Nepal, 2007; Thapa, Murayama, & Ale, 2008). This urban growth accelerated during the 1970s and 80s due to the rapid expansion of city cores and the emergence of

urban sprawl (ICIMOD et al., 2007). In a relatively short span of time, the valley has now developed into the largest metropolitan region in the country with a population of over three million people (KMC/World Bank, 2001; Muzzini & Aparicio, 2013).

The current rapid urban growth of the Kathmandu Valley has been poorly controlled, and has resulted in the haphazard development of most new urban areas. While there are a number of problems in the planning and design of urban areas (Adhikari, 1998; Thapa et al., 2008), the Kathmandu Valley Environment Outlook (2007, p. 54) highlights “uncontrolled urban sprawl” and “unplanned land subdivision” as two major issues related to the present development of the valley. Several consequences of this urban growth pattern can be observed, more specifically, in the transformation from a planned and compact traditional settlement to a modern suburban sprawl (KMC/World Bank, 2001). The problems with the current urban growth have also been manifest in the physical environment of new neighbourhoods that have negatively affected the quality of urban life and social well-being. Observations suggest that public space in these neighbourhoods have reduced dramatically, resulting in a low provision of communal meeting areas (Adhikari, 1998). Several past studies also

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indicate the loss of public space as one of the major consequences of the valley's current urban growth (Adhikari, 1998; KMC/World Bank, 2001; Pradhan, 2003; Shah & Pant, 2005; Shrestha, 2005; Shrestha & Shrestha, 2006; Tiwari, n.d.; Zurick & Rose, 2009).

This study examines how the current urban growth has affected development of public space in contemporary urban neighbourhoods of the Kathmandu Valley. This paper first presents an overview of the current urban growth in the valley, outlining the influencing factors and approaches taken for regulation and highlighting the current urban scenario. Secondly, the paper describes the nature of the development of public space, drawing on the findings from the case study of three new neighbourhoods. Finally, the impact of the current urban growth and the factors that have played a role in the present development of neighbourhood public spaces are discussed. The definition of neighbourhood public space in this study also encompasses community buildings, in addition to open spaces because such buildings are also owned by a community and have an equal potential to act as a platform for social gathering.

## 2. Urban growth in the Kathmandu Valley

The Kathmandu Valley is a bowl shaped geographical area, which lies in the central hill region of Nepal at an altitude of 1350 m above mean sea level (Thapa et al., 2008). The valley has a surface area of 665 km<sup>2</sup> (ICIMOD et al., 2007), and consists of three principal towns: Kathmandu, Lalitpur (Patan) and Bhaktapur, in addition to other smaller settlements.

With a history of more than two thousand years, the Kathmandu Valley has remained a major urban centre of the region since its evolution. In ancient and medieval times, the valley was ruled by several dynasties, notably, the Lichchavi and Malla rulers (Hutt, 1994; Korn, 1979). The valley became the capital of greater Nepal in 1769, following the seizure of its towns from the Malla kings by Prithavi Narayan Shah. However, the Shah rule was interrupted in 1845 as Nepal went to the political control of the Rana Prime Minister (de facto ruler) for 104 years. It was a period of isolation from the outside world and there was a high level of control in entering the valley for other Nepalese and foreigners during this period (Shah & Pant, 2005). In 1951, the political change brought the Shah kings back to the throne, establishing democracy in the nation and ending the period of confinement.

### 2.1. Factors behind current urban growth and approaches taken for regulation

The end of Rana rule in 1951 not only marks a political change in the history of Nepal, but it also has had several physical and socio-economic consequences – with a significant level of impact on the growth of the Kathmandu Valley. Two factors that have played a major role in the valley's current urban growth are the development of physical infrastructure and the increases of migration and population.

The political change was backed up by several development initiatives that included the development of physical infrastructure such as the construction of the Tribhuvan Highway in 1956 and other major highways by the end of the sixties (Sharma, 1989; Subba, 2003). This facilitated the movement of people and goods between the valley and other major areas of the country, including the Terai region. By 1975, the present Ring Road encircling the two major towns of the valley, Kathmandu and Lalitpur, was built, providing a linkage between the city core and the hinterland. With this, the valley, which remained as a confined area for the centuries, gradually started to establish contact with other parts of the country.

Over the last 60 years, the urban population of the Kathmandu Valley has increased fivefold, from 197,000 in 1952 to 996,000 in 2001, and to 1.5 million in 2011 (Muzzini & Aparicio, 2013; Poudel, 2012). It currently consists of about 30% of the total urban population of Nepal (ICIMOD et al., 2007; Muzzini & Aparicio, 2013) and the annual population growth rate is approximately 3.9% per year (CBS, 2003; Muzzini & Aparicio, 2013). Migration has contributed largely to the rise of population. In 2001, about 42% of population living in the valley was found to be migrants (Thapa et al., 2008). The migrating population increased significantly in the last decade due to the nation's internal conflict and political instability (ICIMOD et al., 2007). Several other pull factors have also played a significant role with basic services such as electricity, water supply and sanitation, telecommunication, education, road and transportation are better developed in the valley compared to rest of Nepal (ICIMOD et al., 2007).

Several institutional approaches were taken to regulate urban growth in the Kathmandu Valley since the 1960s. Government authorities drafted a number of policies, acts and regulations, and prepared development concepts and plans that aimed at planned urban development. However, these plans lacked effective implementation, primarily due to political commitments (ADB, 2001). In the 1970s, the Kathmandu Valley Town Development Committee (KVTDC) (now Kathmandu Valley Development Authority) and local municipalities introduced site specific growth management tools such as Site and Services, Land Pooling schemes and Guided Land Development in different parts of the valley. Unfortunately, these tools also achieved only partial success, while most new developments took place spontaneously without any intervention from the authority (ICIMOD et al., 2007). In addition to this, the current By-laws (KVTDC, 2007) also proved to be inadequate to address the problems of urban growth, with a very little control over its processes and consequences.

### 2.2. Contemporary urban scenario

Following the “anarchic urbanization” as labelled by Toffin (2010, p. 151), the contemporary urban scenario of the Kathmandu Valley demonstrates an uncontrolled and haphazard growth of urban sprawl. The city form resembles a radial growth pattern due to the expansion taking place in all directions from the city core with the “sprawling outer rings” (Subba, 2003, p. 106). This urban form does not show any coherent character in terms of urban block formation, and appears to be disintegrated amid the sprawl. A closer observation reveals that the common practice of grid layout (both formal and loose) is missing with noticeable problems in the subdivision of land and the layout of the streets and residential plots.

Adhikari (1998) argues that virtually all Nepalese new towns or urban expansion of recent origin have evolved unplanned, with the Kathmandu Valley as no exception. In the valley, a large fraction of land development has taken place informally through the efforts of private land brokers (Karki, 1991). Subba (2003, p. 119) makes a similar observation and argues that “informal land development processes have emerged as the dominant sector in the production of space in the valley”. According to Shrestha (2010), it is estimated that approximately 90% of houses are still constructed informally, following the traditional practice of owner-built housing development. These shortcomings with current urban growth are directly reflected in the development of new neighbourhoods, with a poor provision of basic infrastructure. There is a severe shortage of community facilities, including open spaces and green areas and other urban amenities in many new neighbourhoods of the Kathmandu Valley (Adhikari, 1998; Chitrakar, Baker, & Guaralda, 2014). Shrestha (2001, p. 17) observes that “unlike old neighbourhoods of

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