

Commentary

## **LAND MARKETS AND THE EMERGING URBAN FORM IN THE KATHMANDU VALLEY**

**Biresh Shah**

The form of a city represents the sum of many dominant forces that give the city its distinctive physical character. Throughout history, distinct models to build cities have represented many different cultural, political and economic aspirations. Kathmandu valley, the oldest and largest urban region in Nepal has been no exception to this phenomenon. Towards the beginning of the last century, ‘modern’ urban planning emerged as a discipline to manage city growth in the West. Modern urban planning has been defined as a technical and political process concerned with the control of use of land and design of urban environment to guide and ensure the orderly development of settlements and communities. With revolutionary developments in transportation and industrial technology, the cities of Europe emerged out of their medieval walls to expand rapidly, leading to major socio-economic and environmental transformations. The modern origins of urban planning lie in the modes of urban reform that arose as a reaction against disorder of the industrial city in mid-19<sup>th</sup> century Europe.

In the past half a century, Nepal’s two giant neighbors have followed two different trajectories of managing contemporary urbanization. Intensive planned urban development has been used as a tool to transform a huge primarily rural population into an economically modern society in China. The Chinese government has invested heavily in cities and infrastructure, setting a target of transferring 250 million people to new cities by 2025. In India, the cities have swelled exponentially, as people migrate from vast rural areas to cities looking for opportunities. The urban management strategies have been largely reactive so far, although India has had a history of building distinctively planned cities such as Jaipur, Delhi and Chandigarh. In recent years, proactive strategies towards managing the rapid urbanization phenomenon have been launched by the Indian government.

## History of Urbanism in Kathmandu Valley

It is recorded that small settlements emerged on high ground in Kathmandu valley almost two millennia ago (Tiwari 1992). These were settled and ruled by the Kirats, the indigenous people of the valley region. Subsequently, Lichchhavi rulers are believed to have introduced the knowledge of the Vedic texts and the experience of laying out larger towns on level ground. This period saw the establishment of towns and capital cities, based on definite models of urban form prescribed in Vedic texts.

The architecture and urban form of the Kathmandu valley that developed from the 13<sup>th</sup> century to the 18<sup>th</sup> century marks a high point in the civilization of the valley. The valley, which was divided into three city-states during the Malla period, is the capital region of Nepal today and its principal metropolis. An original architectural language in fired clay bricks and wood evolved in the valley, which has been the subject of much attention in the past few decades for scholars and conservationists from around the world. The building types during this period of development largely remained residential and religious. Building forms and urban space were very closely knit together in the urban form. The urban form was regulated by a matrix of an elaborate system of urban spaces and corresponding rituals. The valley urban structure that developed in this period consisted of a hierarchy of principal, secondary cities and satellite settlements. In this traditional urban structure, the fixing of town boundaries, demarcating the built-up area of the town from the surrounding region of agricultural landscape, has been particularly significant. This was achieved by the positioning of shrines of the *Aṣṭamātrikās*, the eight mother goddesses and other deities, in the surrounding landscape at ecologically sensitive spots, and linked to the town by corresponding rituals. Scholars like Mary Slusser (1982), Sudarshan Raj Tiwari (2001 and 2002), Niels Gutschow and Bernard Kölver (1975), Saphalaya Amatya (1996 and 2011), etc. have written extensively about the relationship between the rituals and urban space in the historic urban structure, which has been the subject of interests of urban scholars, architects, urban designers, as well as tourists from around the world for the past fifty years.

The first major challenge to this landscape started with the construction of many very large neo-classical palace compounds of the Rana rulers at the fringe of the old cities, and the suburban development along the roads connecting the palace compounds. Today, as the entire valley floor coalesces

into a continuous inhabited sprawl, extending into the slopes of surrounding hills, the urban landscape does not seem to subscribe to any established ideal or model of the 'modern city.' One of the principal factors driving the shape of this landscape is the characteristics of the land markets. In the development of cities, land has always been a limited principal resource. Therefore, the characteristics of control over land have determined the shape of the urban landscapes. In the historic urban structure of the valley, the size of the cities/towns was controlled through a variety of instruments, spatial and sacred. These 'instruments of control' produced a very compact and rich urban form and established a clear relationship with landscape around. This was done so that precious agricultural land may be preserved as the major resource of the economy. In today's Kathmandu, the land, which has lost its main productive value of farming, is transacted freely in the marketplace with feeble controls of the state.

### **History and Characteristics of Modern Urban Planning**

In present day Kathmandu, one often comes across a sense of despondency over the seeming disorder that prevails in the experience of the contemporary city. This sense of despondency has arisen despite a series of efforts to establish modern urban planning in the valley. In fact, dozens of 'master plans' and urban development studies covering the entire spectrum of development of modern cities have been undertaken in the past fifty years.

The first modern town planning office was set up in Kathmandu in 1962 under the guidance of a Swedish Urban Planner, P.O. Lefvert. Half a century later, dozens of plans and studies on the valley have been undertaken by experts from every part of the world, funded and supported by a large number of international and bi-lateral aid organizations. The first major document on urban development planning that was prepared was 'The Physical Development Plan of the Kathmandu Valley,' supported by the United Nations Development Programme (UNDP). This effort was directed by Carl Pruscha, an urban planning advisor appointed by the UNDP, who worked from 1967–1973. In 1977, the UNDP and United Nations Educational, Scientific and Cultural Organization (UNESCO) sponsored the preparation of 'Master Plan for the Conservation of the Kathmandu Valley' by a team led by Prof. Eduard Sekler. More recently, the Asian Development Bank sponsored the preparation of 'Kathmandu Valley Urban Development Project' in the 1990s, which was prepared by Halcrow and Fox, the UK-based consultants.

The population of Kathmandu valley has grown several fold in the last five decades, from under a hundred thousand to over four million (Shrestha 2012a).<sup>1</sup> None of the master plans prepared in these decades decisively was able to shape any part of the city that has developed since. So in Kathmandu valley one sees the development of a culture of making urban plans and studies, that uphold the latest or highest international technical standards; parallel to which a highly charged city building culture has evolved with minimal contributions from the ‘master plans’ and largely shaped by ad-hoc and reactive urban interventions. This dominance of ad-hoc interventions, which have shaped the contemporary city decisively, have never been properly studied and documented.

As plans after plans were prepared to regulate development, vast tracts of farmlands between the compact medieval cities have been built up. The making of technical sophisticated studies of the city and master plans, funded by well-endowed international agencies, has become a sub-sector of the city’s economy by itself, irrespective of the actual relevance of these efforts on the development of the city.

Since the early 1960s, although several master plans have been prepared, given the nature of the land-markets and the phenomenon of urbanization in the last few decades in the valley, it became almost impossible to implement most conventionally developed plans.<sup>2</sup> Current models of urban planning employed by Nepali planning offices originate from a very long and evolved tradition of city building in the West. The landholding mosaic of the valley, made complex by thousands of years of continuous habitation and the valley’s own historical/political experience with urbanization, does not lend itself easily to the statuettes of modern urban planning.

Urbanization is a natural outcome of modern development policies and globalization. Currently less than 20 percent of Nepal’s almost 30 million

<sup>1</sup> Shrestha (2012b) mentions the exponential rise in the population of the valley, which was about 60,000 in 1950/51 (2007 v.s.). It reached one million in 2058 v.s. and is estimated to be around four million in 2013. The official 2011 population census presents a figure of 2.5 million for the Kathmandu valley.

<sup>2</sup> According to Acharya (2000), almost three dozen studies and plans were prepared in the field of urban planning, urban infrastructure development, and urban heritage conservation from the 1960s till 2000. These plans were prepared by experts from around the world in collaboration with local experts, and sponsored by every major international agency.

population lives in urban areas.<sup>3</sup> However, as the population of the world transforms towards a primarily urban-based one, this low percentage of urban population, in countries like Nepal, has created huge pressures on existing urban centers and their land markets. Extreme pressure of urbanization exerted upon a principal urban center like the Kathmandu valley, in a predominantly non-urbanized nation, cannot be fully anticipated in urban master plans being prepared today.<sup>4</sup>

### **Factors Driving Land Prices**

On 10 December 2009, the largest national daily newspaper *Kāntipur* reported that Nepal Rastra Bank, the national reserve bank, had asked commercial banks to cap their lending related to land and real estate transactions at 25 percent of their total loan portfolio (Kantipur 2009a; also 2009b). The reserve bank argued that that the current hype in land and property prices was very risky and that large scale monetary dealings in land and property transactions could lead to a major financial crisis. The daily also reported that the announcement by the reserve bank was made concurrent to a visit by an International Monetary Fund (IMF) delegation in the city, which had raised concern in this regard. Since the western countries had just suffered a collapse in the financial markets triggered by real estate loan crisis, the warning of the reserve bank seemed along expected lines to preempt a future financial collapse in Nepal as well.

The current trend, immediately before and after the 2006 *Janaāndolan*, in property price increase finds its origins just over a decade ago. There are three major factors responsible for it: the intensification of the insurgency in the country prior to the declaration of the republic; the remittance flow

<sup>3</sup> According to Subedi (2068 v.s.: 34-35), who cites the 2011 national population census, the total population of 58 designated municipalities in Nepal is 4.52 million constituting 17.6 percent of the population of the country. The Kathmandu valley accommodated nearly 25 percent of the national urban population.

<sup>4</sup> In an article in *Kāntipur* daily on the 'power struggle between the traditional and migrated elites of the city' the author Dhruba Simkhada (2012: 7) quotes Bhim Subedi on how with each political upheaval in the country, the Kathmandu valley has experienced unexpected surges of population. Population growth surged after the political changes in 2007 v.s., 2037 v.s., 2046 v.s., 2063 v.s. According to Subedi, as the well-to-do people in the villages migrated to the valley, a lot of people from the villages entered the valley looking for work, and hence it became crowded with rich as well as poor migrants.

from the foreign lands; and the emerging financial and other services sector in the city.

Towards the end of the last century, as politics in the capital got more unstable, the Maoist insurgency intensified in the hills. Due to the conflict, people started selling their land in villages and remote towns to move to safer places. This led to a sudden surge in the land prices in the cities. Kathmandu received a bulk of this migration due to the perception of being the safest place and having the maximum opportunities. This started the first surge of land sales in the agricultural landscape outside the city limits. The land parceling became smaller (typical unit for sale was reduced from *ropani* [5476 sq.ft.] to *ānā* [342 sq.ft.]). This not only led to the escalation of the land prices, but also fragmentation of land holdings. Large tracts of lush agricultural landscapes at the fringes of the city were transformed within a few years into highly dense urban forms with narrow access roads and virtually non-existent public spaces and social infrastructure.

The insurgency had another impact as well. It led to the closure of major industries and businesses. A lot of business activity in Kathmandu got concentrated in the land markets as the prospects for investment in other sectors of the economy dipped, thus further escalating the land prices. At the same time, a large percentage of the working population moved to the booming markets of the Gulf and South-East Asia to find employment. Subsequently, a huge flow of money came into the valley through remittance. The large volume of remittance kept the country afloat in these difficult times. The remittance economy also fuelled the property prices in the valley, since the priority of the family left behind by those working abroad became the ownership of real estate especially in the valley.

During this period, several private banks were established as well, which developed a new thriving financial services sector in the city. As economic difficulties increased in other parts of Nepal, the availability of finance created a large segment of people involved in the thriving service and trade economy with large disposable incomes in the city. This further caused an increase in land prices and construction boom. Furthermore, as other businesses ran into trouble, the potential to mobilize finance in the real estate sector became very attractive, adding further to escalation of land prices.

In 2008, the country was declared a republic, and a Constituent Assembly (CA) was elected to draft a new constitution. The Maoist party gave up armed insurgency and joined the political mainstream, participating in the

election. Contrary to expectations of many political pundits, the Maoist party emerged as the largest party in the new CA and led the government. For a while, the country seemed to be settling down. Tourism, which had suffered badly, began to grow and the spinoff was generally felt all around. As new business/industries were registered and hydropower dreams were being projected, there was a sense of optimism after a long time. The increase in the price of land in the valley went unabated.

The banks, which initially lent money to support the purchase of single houses built by organized builders or construction of private homes found the lending safe and lucrative since the land was used as collateral. As the land prices kept growing, the banks started lending in the purchase of land itself, as this was far more lucrative. It has been unofficially reported that in this ‘buy and sell frenzy’ of the urban land parcels, in some cases one bank was lending to one buyer for the purchase of a property while the other bank would lend to another buyer to purchase the same property at a higher price. The potential of large profits in the land transactions encouraged the private banks to lend more aggressively for land purchases. The opening of many new private banks, in a market with limited business and industrial potential, had heated up the competition further for investment in the real estate market.

## **Key Developments in the City affecting Land Prices**

### ***Evolution of Private Sector Housing Projects***

As a result of sharp increase in land prices, a new genre of developers entered the real estate market, enthused by the rising land prices and a relatively high allowable floor area ratio (or FAR, the index which stipulates the number of times the area of land that can be built on a plot), to develop multi-storied residential apartment blocks on large plots of land. This was also enthusiastically supported by finance available from the banks. Strangely, with the passage of the Ownership of Joint Housing Act, 2054 v.s. in the Kathmandu valley, the building regulations made a stipulation of 3.0 FAR throughout the valley (within the Ring Road) for multi-ownership apartment buildings irrespective of zoning or infrastructure. The multi-storied apartment building offered a new product in the market for the newly rich as well as a dream for those aspiring to be financially successful. These projects also offered an investment opportunity for the banks. With more projects of this nature entering the pipeline, there was substantial increase in land prices, as the high FAR provided the illusion that the proportion of high cost of land

got distributed in bigger number of residential units. The flipside was that skyrocketing land prices also increased the launching of a number of high-rise residential apartment projects and offices, for obtaining 'viable returns' on investment in high cost of land.

Thus a sprinkling of high-rises started emerging in the urban landscape, largely unconnected to zoning or infrastructure provisions. Higher FAR stipulations, in most planned cities, are almost always made for specially zoned areas in the city, based on adequate infrastructure provisions as well as potential for high-rise high-density development, and not as a general rule applicable throughout the city.

The vast majority of housing in the Kathmandu valley has been owner-built in the past. However, over a decade ago some sort of organized private sector emerged to start small to medium sized land sub-division schemes. Interestingly, the evolution of the 'organized sector' in housing, from land sub-division schemes to multiple identical readymade single homes to the construction of high density high-rise apartment development with centralized service provisions took place in just about five years.

A study of the proliferation of advertisements in daily newspapers provides an illustration of this evolution. In the first years, there was a flurry of advertisements on land sub-divisions, which were efforts by land brokers and land developers to sub-divide large parcels of agricultural land into small plots with minimal roads and drainage system. Subsequently, developments with single homes on these plots with a semblance of required infrastructure started coming up. These projects developed as gated communities, and offered 'organized urban living' to buyers. The land prices went up further as the constructed product added value to the price of land. With the success of a few early projects in this genre of development, the daily newspapers were flooded with advertisements of such projects. Within a few years and with the passing of the Ownership of Joint Housing Act a few developers launched high-rise apartments projects, taking advantage of the higher FAR offered by the building regulations. The daily newspapers were soon flooded with computer generated visions of many projects in this genre. The visual landscape of the city was littered with large glitzy billboards of these projects, which triggered the imagination of the residents of the city.

In most other large metropolitan cities, this transition of housing building types has been achieved in decades. Besides, in most cities high-rise buildings came up initially to increase the supply of housing by increasing



the utilization factor of land, which reduced the share of the cost of land per unit. In Kathmandu, though most of these high-rise projects actively drove the cost of land very high as they developed more as an opportunity for the affluent to invest. As of today, there is not much evidence of any project being fully occupied, which can inform us regarding the feasibility of this building type in Kathmandu in a foreseeable future. The FAR established for residential apartments at 3.0 in the city and 3.5 outside the Ring Road seemed quite high. Even in cities around Delhi known for high-rise constructions that we are familiar with like Gurgaon and Noida, the FAR has been 1.75. It is recently with large scale infusion of expressways and mass transit systems that it has been increased to around 4. Normally, the FAR is a function of the level of infrastructure provisions, therefore high FAR is restricted to specific zones of the city. In Kathmandu, the FAR regulation for multiple ownership apartment buildings is generally applicable throughout the valley. There are also no provisions for density in the building regulations, which restrict the number of residential units that can be provided within a unit of land. For example, a building of 100,000 sq.ft. can have 40 units of 2500 sq.ft. and 200 units of 500 sq.ft.

Within the two years of 2008 and 2009, it was reported that several thousand residential units in multi-storied apartment projects were registered with the planning authorities for regulatory approval. While only a few of these projects actually went into construction, these projects created a huge pressure on land prices, as well as available construction capacity and materials availability in the valley. The unit construction costs went up dramatically, subsequently. The high cost of construction coupled with the very high cost of land has made these apartment units unaffordable to the majority of the residents in the city, while also increasing cost of normal construction substantially.

The cap announced by the reserve bank was also followed by a period of liquidity crunch resulting from the market collapses in the Gulf and South-east Asia. A number of these projects stalled mid-way and missed the targets of delivery by big margins, while some remain incomplete. All kinds of efforts are underway by the owners, banks and the government to make these projects viable (as a lot of finance, both personal and institutional, is locked up with these projects).

In the last couple of years however, a market correction seems to be underway as developers themselves have chosen for less utilization of

available FAR to decongest the site and reduce investment cost in construction. As the initial euphoria of high-rise apartments diminished, the developers too got more experienced. A number of large parcels of land are being proposed for building single row-houses, instead of the high FAR utilization of multi-storied apartment buildings. This not only cuts down on the construction cost and time period, but also reduces the length of the regulatory process. Effectively the profits seem to be the same at a much less effort and cost. However, planning guidelines and development incentives have clearly not supported more sustainable models of housing projects in Kathmandu.

### ***Major Infrastructure Projects***

The informal transaction of land has been the norm rather than the exception in the valley in the past half century, and it has also been aggravated by the implementation of large modern urban infrastructure projects. In the past three decades as new large infrastructure projects were launched in the valley, no effort was made to synchronize such projects with the expanding landscape of the city. Large infrastructure projects have largely been planned, funded, implemented and managed as autonomous developments indifferent to the nature of expansion of the city resulting from these projects. In a rapidly growing city, large infrastructure projects, with their large capital outlays and elaborate organizations, take precedence over the need to sync them with urban development plans. The Ring Road, built in the 1970s as a traffic by-pass, opened up the flood gates for an exponential increase in land dealings in the valley. Yet no plan was in place to manage and drive this obvious urban sprawl that the project would trigger.

With the construction of the Koteswor–Bhaktapur expressway further extending to the Banepa-Bardibas highway (both built with Japan government assistance), urban development eastward between Kathmandu and Thimi and beyond has intensified. Ward no. 35 of Kathmandu Metropolitan City (KMC) has emerged as the largest ward in terms of population. While the development pressure has increased there as a result of the new multi-lane highway, the old malaise of entire city sectors evolving as individually built development without the guidance of a commonly understood urban structure continues.

The current proposal for outer Ring Road is adding further to the malaise, although even the detailed survey for the project has not started. The new

fast track road, aimed to connect the valley with the plains in one hour by building a highway along the Bagmati river front, has opened up another area for intensive land transactions as this highway not only offers a fast connection to the plains of Nepal but also a direct access to the site proposed for the second international airport for Nepal. While the initial alignment and earthwork of this new access highway into the plains is still underway, it is reported that a thriving land market has already established in villages along this road. The prices are already being speculated in units of *ānā*.

### ***Speculative Buying of Land as Investment***

In the face of an unstable business environment in the country, individual businessmen and large established business houses too invested heavily in land by acquiring well situated land parcels in the city, as these offered healthy price increases. Parallely, they have also been buying very large tracts of lands outside the city and the valley rim as future investment. A number of business houses known historically for their strength in other businesses entered the real estate sector with no experience. The unit price of land shot up exponentially, as more players entered the fray. While large sections of the valley remain agricultural and undeveloped, land is being bought and sold and parceled into small pieces – with no infrastructure but a muddy track called road – in the District Land Revenue Offices. This phenomenon is spreading into every nook and corner of the valley, along the riverfronts, steep slopes at the foothills, and the rim of the valley.

Vast tracts of lush agricultural field in peri-urban regions of the valley still offer a view of the age-old pastoral landscape, but in reality have been transformed into 100 sq.m. plots on the cadastral maps found in the government survey offices. These plots are subject to repeated transactions now.

The valley which has been settled and farmed for over two thousand years has had a fairly complex landholding structure in the past. With the current wave of land transactions trends the landholding pattern should get more complex for the effective implementation of any ‘modern’ city development plans. Although the government has implemented a few projects of organizing large tracts of land in a planned way through land-pooling, these projects have remained small in scale when compared to the intense demand for land in the valley.

### ***Lack of Allocation of Public Space and Institutional Land***

In recent decades, although the city has grown exponentially, allocation of land for public space, as well as for various socio-cultural infrastructure, has been minimal. Most of the public space in the city has been carved out of the *parti jaggā* (public owned parcels of land on the cadastral plan). The urban space system in the city center today, and socio-cultural infrastructure that still support the city's population is largely four decade old. The exponential rise in land prices has been the main reason in preventing the adequate allocation of land for all types of socio-cultural infrastructure requirements. As a result, the city has been deprived of new schools, libraries, community centers, parks, museums, performance centers, edifices which impart pride in a city for its citizens and build strong communities.

### **Consequences of Exponential Land Price Increase**

#### ***Housing Provisions***

The high cost of land, though, is forcing people who need houses but cannot afford to go further from the city limits to get cheaper land with inadequate infrastructure. Housing for the poor thus has been a major issue in the valley. Thus poor migrants to the city have built squatter settlements on public land, which are at the margins of the city, geographically. These are mainly along river fronts, flood plains, crevices along existing drainage channels and cliffs, and other precarious areas. It was reported in *Kāntipur* that 73 squatter settlements have been established in the greater Kathmandu area. Some of these settlements have formed 'user groups' to negotiate with the government, which plans to clear these settlements from their current location on geographically precarious sites (Khadka 2067 v.s.).<sup>5</sup> The river

<sup>5</sup> Khadka (2067 v.s.) writes about the formation of these squatter communities in the city, which according to him number 73. He further describes their living conditions and their plight. As squatter settlements expanded on riverfronts, the then deputy prime minister announced that encroachments from the banks of Bagmati river and other subsidiary rivers would be removed by the government to safeguard the environmental sanctity of the river system in the valley. Genuine claimants would be compensated by a payment of NRs. 15,000 as three months rent. The National Squatters' Front saw this as unfair to the genuine squatters. They have been demanding a transit camp and a just identification and compensation procedure. The minister also cited complete political consensus on the issue and riled against the non government organizations campaigning for the squatters in the name of human rights (Bista 2012: 4).

fronts have absorbed a majority of these settlements, although they are also the most exposed to river pollution, flooding and expulsions. In the past few years, the number and size of these settlements have grown, despite announcements from the government to remove river front encroachments.

The poor are also moving into newly developed parts of the city with high density and very poor infrastructure, as rents are cheap. They have also moved into the century-old historic settlements in the valley. This has resulted in extensive slum formation in historic city cores, further complicating urban conservation efforts of such areas.

Generally, public housing programs in modern cities bridge the gap between the demand for housing and the supply created by the private sector. Despite the large population of the valley today, there is no 'real' public housing program for providing affordable housing. This is another aspect which makes the Kathmandu valley, unique among contemporary cities of similar size.

### ***The Commodification of Public Space***

The high cost of land has also tempted the public sector/government agencies to lease/sell public-owned land to private promoters for commercial development, under the garb of 'sound financial management' of available assets with public private partnership programs. This has further reduced the currently available public land within the city limits for the purpose of public/civic use. Although there have been some exceptions to this trend, like the Gangalal hospital on the premises of the erstwhile Bansbari Shoe Factory, there are many examples of scarce and much needed public land being leased by the public organizations in the name of financial sustenance.<sup>6</sup> In the re-adjustment of various vested interests and political forces in the city, often the remaining public space becomes the first target. There are still quite a few remaining large parcels of land in the valley, which are likely to be contested by a variety of interest groups as the allocation of land for public use has been miniscule.<sup>7</sup>

<sup>6</sup> Columnist Saurabh (2012: 6) writes about the long and important cultural and spatial history of Balaju Park at the north-west corner of the valley. He wrote in the context of the reported distribution of the Park land to displaced squatters by the government.

<sup>7</sup> It has been reported that the large field in Katunje at the intersection on Araniko Highway just before Bhaktapur was being claimed by almost a dozen groups ranging from

In the newly developing neighborhoods, where there is a serious shortage of public space, the last remaining public spaces are being walled off by local ‘social groups’ in the name of maintenance and safety for ‘public benefit.’ Public schools – which do not have sufficient land allocations – have also occupied these areas to expand their infrastructure. In a documentation of eleven public spaces distributed throughout the Kathmandu Metropolitan City (KMC) in 1997, this author with three colleagues had prepared a proposal for developing these spaces. This proposal was submitted to the KMC for consideration as a pilot project for developing urban public space in the city. The proposal could not go far with the KMC, primarily due to lack of budget. More than a decade later, a number of these spaces have been fenced by ‘local groups’ to prevent ‘encroachments.’ A number of these spaces have been occupied by public schools and local community groups and have been built over (Urban Space Improvement Initiatives 1997).

Ironically, in these times of ‘plenty,’ when property prices in Kathmandu match European standards, there has been negligible investment in social infrastructure like parks, cultural complexes, museums, schools, etc. The cultural facilities and spaces that we still use frequently today, like the City Hall, the Academy Hall, the Tundikhel, the Stadium, the Bhrikuti Mandap are vestiges of the so-called ‘autocratic era.’ The city center, as we know today, starting from the Narayanhiti Palace complex in the north to the Dasharath Stadium is also the last major effort to implement a conscious urban design in the city, consisting of a system of open spaces, cultural institutions, government/institutional enclaves, exhibition grounds, etc. It is not very clear though, if this effort to impart the city with a new center was related to any of the master plans or was the cumulative result of a series of individual decisions in the 1960s and the 1970s.

### *The Fragmented Landscape*

The rapid increase in the cost of land prices, meant that the campus of private schools shifted beyond the city limits to locations where land was available at affordable rates. However, this meant much longer bus commutes for children and additional vehicular traffic. Schools, which cannot finance their own campus, are forced to operate out of sub-standard rented facilities

---

local user groups for a park to the Department of Transport Management for a bus station to a hospital.

in the city. Public schools, with limited financial resources, have resorted to the use of public land in various parts of the city (like in Baluwatar Chowk and Dhumbarahi) to expand their physical infrastructure.

As the city increased in size and complexity, there was a demand for a wide range of institutions and social infrastructure. Since very high land prices in the current city limits made it impossible to financially establish these institutions in suitable locations, they were established further into the agricultural/rural landscape due to availability of affordable land. A number of medical colleges and engineering colleges too were established this way. While these institutions had to cope with a severe shortage of infrastructure and other locational disadvantages, the prices of land around their campuses shot up leading to another round of speculative intense development.

Under the Local Governance Act, 2051 v.s., the municipalities too allotted public land within their jurisdiction to various institutions, resulting in construction of campuses at the fringe of the city on parcels which had survived as public land for ages. The provision of higher FAR (3.5) also drove the land prices in such areas, thus pushing development further away from the existing urban areas. We have also witnessed high-rise apartment complexes (as a result of higher FAR provided in building regulations outside the Ring Road) come up cheek-by-jowl with agricultural landscape marred by brick-kiln pits.

### ***Disaster Risks***

The rapid increase in land prices in the last decade has affected the urban form significantly in one aspect particularly. The high cost of land has forced a very intensive utilization on the buyers/owners. This has resulted in very dense poorly engineered constructions in the newly urbanized agricultural tracts, as well as, in the reconstructed parts of the historic urban cores. The very narrow access roads and lack of public spaces make these constructions very dangerous places in view of the high seismic risk of the valley. The traditional systems of open spaces in the historic cores are losing their value as the reconstructed structures far exceed the allowable height limits. Even if we set aside environmental concerns and quality of life issues, the prospect of an impending natural disaster could lead to unimaginable consequences not only to the city but the entire nation. The valley floor and the slopes offer soil characteristics with extreme variations, yet buildings are being

constructed everywhere irrespective of the diverse range of vulnerability due to specific soil conditions in many places.<sup>8</sup>

Subedi (2068 v.s.: 34-35) writes that while the population density per square kilometer in Nepal remained at 181, the same of the valley has reached 15,000. The population density of KMC has increased further to 20,000 per square kilometer. If the rate of increase of population is to follow the trends of the past two decades, then the population of Kathmandu should double in the next 18 years (Subedi 2068 v.s.). These figures point to a very worrisome and risky scenario for the emerging urban landscape. Arguably this will result in vastly increased densities in parts of the valley, leading to more precarious constructions and depletions of remaining open space.

The recent (2013) havoc created by floods and mudslides in the Uttarakhand in India also offers lessons on the consequences of ad-hoc development driven by speculation. We have witnessed the scenes of entire towns getting swept away by the floods, as well as new settlements getting damaged by the huge force of the mudslides. The huge tourism traffic fuelled the unplanned development of several settlements, where huge profits were made with the rapidly rising cost of land due to intensive demand for new construction.

## **Financial Aspects of the Rapid Urbanizations**

### ***Financial Benefits of the Land Markets***

The volatile unregulated land market that has dominated the urban development in recent past has actually benefitted private individuals, the private sector and the state alike. The rapid increase in land prices has enthused developers to develop large urban projects previously thought as unfeasible, and to see the opportunity to mobilize large financial outlays with large profits to be made in a relatively short time span. In the face of diminishing economic opportunities in other sectors, businessmen saw substantial opportunities in these projects to invest their money. Individuals invested on yet smaller amounts in small parcels of land from savings/borrowings to profit from the soaring prices.

<sup>8</sup> In an article in *Himāl Khabarpatrikā*, Dambar Krishna Shrestha (2012a) cites a 2011 report prepared by the National Society of Earthquake Technology-Nepal (NSET-Nepal) which projects that in case of an earthquake in Kathmandu similar in intensity to the 1934 earthquake, the number of deaths could be 100,000; the number of injured 200,000; and 1.5 million could be rendered homeless.



The fees collected from land rights transfer is a major contributor to the government revenues. Since the government collects three percent of the cost of land established during land transactions, the rapid increase in prices added to the government coffers. Besides, the government also collected a capital gains tax on the sale of urban property.<sup>9</sup> It seems the government has withdrawn this capital gains tax since last year amidst falling land prices and diminishing number of transactions.

The government also collects fees for issuing planning permits to large land-subdivision projects, land-subdivisions with constructed single homes, and multiple-ownership apartment buildings. At the municipal level, municipalities in the Kathmandu valley charge a variety of fees (related to the size of the project) to process the application to construct a building project.<sup>10</sup> Besides, the Ward offices are the collection points for yearly payable property taxes (which are again based on a current valuation of property). Therefore, urban development in the valley has provided a wide range of revenue sources for the government. The exponential growth in the size of the city has also increased the state revenues.<sup>11</sup>

It was reported that in an evaluation conducted by the Local Finance Commission (under the Ministry of Local Development) of all the municipal governments in Nepal, the Kathmandu Metropolitan City had been ranked 58<sup>th</sup> (Kunwar 2066 v.s.) The results of the evaluation could be considered questionable, since KMC is by far the largest and most complex among the

<sup>9</sup> It was reported that during a sale of a land parcel of 2200 sq.ft. in the central city, the capital gains tax paid to the government was upwards of NRs. 10 million for a transaction of NRs. 130 million (Kantipur 2010).

<sup>10</sup> Kathmandu Metropolitan City:

- i. Building area up to 3000 sq.ft.: NRs. 10/sq.ft.
- ii. From 3001 sq ft to 5000 sq.ft.: NRs. 15/sq.ft.
- iii. Above 5000 sq.ft.: NRs. 20/sq.ft.

Lalitpur Sub-metropolitan City:

- i. Building area above 3000 sq.ft./more than 5 floors: NRs. 15/sq.ft.
- ii. Business category building: NRs. 12/sq.ft.
- iii. Others (residential, etc.): NRs. 10/sq.ft.
- iv. Conservation area: NRs. 9/sq.ft.

<sup>11</sup> In his report Makar Shrestha (2066 v.s.) writes about the substantial decline in land transactions in major Land Revenue offices of the Kathmandu valley. In a following report Roshan Adhikari (2010: 19) writes about how in the month of Baishakh 2067 v.s. the five main Land Revenue offices in the valley collected 42 percent less land transaction fees than the previous month, indicating decline in revenue collections.

municipalities in Nepal. In fact, the other municipalities do not even come close in scale. But it does point to the fact that a huge gap exists between the demand for services within KMC jurisdiction and the level of investment as well as organization capacity of KMC to deliver. As the gap between demand of urban services and their delivery widens, it results in accelerated environmental degradation. The environmental degradation coupled with the financial complication arising from the depressed property markets has resulted in a city form, where inefficiencies and management complications are the norm than the exceptions. Worsening environmental conditions and falling prices spur desperate measures, which further impact the environmental quality. Although the Kathmandu valley for all practical purposes functions as one integrated urban region, it is divided into five municipal boundaries and dozens of Village Development Committees, with large variation in urban management capacities and overlap of geographical jurisdiction, which leads to new set of complications.

### *City Environments and Financial Dynamics*

Since the collapse of the first Maoist-led government in 2009, the political situation in the country deteriorated once again into a perpetual stalemate, affecting the economic activities once again. In the meantime, the global financial crisis, which affected places like Dubai and Malaysia, resulted in lessening the flow of remittance in the valley. As the flow of remittance diminished, the banks were faced with a liquidity crunch.

It was reported that since the banks had already invested heavily in the real estate sector, they started borrowing from the central bank and other private banks, at interest rates higher than the interest paid to their depositors, just to keep operating. The lending cap under the directives of the central Nepal Rastra Bank and the higher interest rates meant that several projects got stalled or even shelved. On the other hand, there were far fewer buyers for these projects as the credit for purchasing the apartment also became a lot more difficult and costly. This has cooled the intense speculation in the land market going on in the preceding few years. Although, the money supply has improved now, the central bank still has the lending cap in place. However, there are fears that if the money supply to the real estate sector gets further squeezed, it could adversely affect the property markets and many related industries and could lead to a number of banks getting sick. Investments in

land and property developments have suffered as prices of land dropped and sale of apartments stagnated.

In his report on the problems of the real estate sector Roshan Adhikari writes about the sharp decline in the registration of new housing and plotted development projects at the Kathmandu Valley Town Development Committee, as compared to the boom period a year ago (Adhikari 2067 v.s.). He quotes businessmen involved in the sector that the central bank's directive, on the lending cap, was more concerned with protecting the banks, while overlooking the interests of an industry contributing to the national economy. Due to the lack of availability of funds, the liquidity crunch also prevented new banks (with a real estate loan portfolio less than the cap) from investing due to high cost of finance (14–15%). Adhikari writes how individual developers, without access to bank finance, were operating with cash available to them by rotating cash from payments for one project to the next. This desperate measure could have serious consequences on the quality of projects delivered.

The cost of required investment in adequate infrastructure and the costs of adverse environmental effects are not realistically factored in the lucrative real estate transactions, which profit the business sector as well as the state. While the real estate sector offers return on investment faster than any industry, it can also head in the opposite directions as has been demonstrated by the recent global economic meltdown caused by the sub-prime loan crisis in the US. So, the profits generated by the real estate business have always been great till they hit 'the wall.' As land prices have dropped and the number of buyers for apartments in tall buildings in Kathmandu has also diminished, real estate projects are not in favor with most banks today. While economic/financial analysts may ascribe this situation to the cycle of any sector going through boom and bust, the city is left to deal with the physical consequences of this cycle.

Cities have long-term value for nations. Unrestricted land markets in cities create a fragmented landscape, which makes urban management a complex task resulting in adverse environmental conditions. While they do provide short-term profits through speculations, the unreliability of the real estate market creates problems at many levels. The unreliable behavior also forces players to take ill-informed ventures, which further have environmental consequences. A centralized control of land markets, as practiced in many South Asian cities, creates its own set of problems. Highly planned cities like

Delhi too have almost 40 percent of their population residing in ‘unauthorized settlements’ (not formally planned urban areas). The more specific characteristics of land markets in Kathmandu are distinct from cities like Delhi. Land markets in Delhi are dominated by institutionalized players, be that government or private sector, e.g., Delhi Development Authority in Delhi and Delhi Leasing and Finance in Gurgaon. In Kathmandu valley, the land market is dominated by a much greater variety of players from individual migrants to large developers. In the absence of a centralized institutional player in the land market, the benefits from the speculative land markets has certainly been more equitable.

However, a detailed and up-to-date knowledge of the characteristics of land markets should form the core basis of urban planning methodology in Kathmandu. Such core basis should principally consider (a) conserving and strengthening of and access to public space (in a broader sense); (b) guaranteeing a minimum level of delivery of urban services for all; (c) ensuring the control and eventual reversal of ecological depletion of the valley; and (d) most importantly establishing disaster management as a lynchpin in any development approval in the city.

### **Free Land Markets and the Culture of Building Cities**

In today’s Nepal, Kathmandu captures the imagination of a majority of Nepalis. Everybody, rich or poor, desires to be here, and own a property. So even the paddy fields, river fronts, precarious slopes of the hills get sold out in plots big and tiny, without any regard for access, infrastructure (physical and social), and public space. The government does not have the resources to invest adequately in the city, yet this land market is also a source of significant revenues for the state. The cynics will talk about waiting for the next impending ‘big one’ to jolt the city into shape. Yet, very few want to head for other destinations in the country. The other towns of Nepal have remained largely ‘small’ towns, compared to Kathmandu. As Subedi (2068 v.s.) writes, no other city in Nepal can compete with Kathmandu despite all its problems. Despite all the talk to shift the capital from the valley, bring about a paradigmatic shift in state organization, increase investment dramatically in regional centers under the proposed federal system, nothing has been achieved realistically, thus ensuring the hegemony of Kathmandu valley. It is still attracting the majority of Nepalis, despite all its problems. It has provided a space to all segments of Nepali society.

The metropolis of the valley is undergoing intense transformation as the predominantly rural population of Nepal transforms into a large urban population. Urban planners today prepare master plans based on expected growth projections of the city, development trends, and desired outcomes of urban management strategies, relying heavily on techniques, tools, models of planning from far more industrialized/advanced economies with stable populations and a substantial history of building complex cities. When confronted with the dynamics of the land markets here, these plans become redundant.

The urban planning process in the valley needs simplifications. We need to establish achievable targets, but also to set benchmarks which must be achieved, and an end to ad-hocism and compromise (*Nepāl ho, ke garne?*). A great irony of our times has been that scholars from all over the world have come to study and document cities envisioned and built indigenously centuries ago, and on the other hand, experts from all over the world have also come in the past five decades to help us develop undevelopable ‘master plans.’

Today in Kathmandu, the speculative land market drives the imagination of many, and it has certainly made a small minority very rich. However, we must begin to think seriously about giving back to the city rather than only consuming from it. As recent results show, incessant ‘consumption’ of the city is economically as well as ecologically unviable and can be outright hazardous to healthy living. The ad-hoc and unsustainable urban development driving the urban landscape may be adding capital value in the short term, but a lot of it gets offset by the costs of the degrading environmental conditions, health conditions, inefficiencies due to poor housing and transportation and safety of life and property. Perhaps this current dampening of land markets and the real estate industry offers us a window of opportunity. Vibrant land markets in cities provide us opportunities to profit from investments, which is everybody’s right in a healthy society. However, what is built now will survive for decades, if not centuries. We aspire for the modern metropolis. Yet while we have misplaced our traditional culture to build great cities, we have yet to develop a modern city building culture.

### **Acknowledgements**

The author would like to acknowledge the thoughtful comments on the preliminary draft provided by Prof. S.R. Tiwari, Mark Liechty and Andrew Nelson.

## References

- Acharya, Nirmal Kumar. 2000. Existing Barriers in Planned Development of the Kathmandu Valley. MSc thesis, Institute of Engineering, Tribhuvan University.
- Adhikari, Roshan. 2010. Gharjaggāko Mahinaipicche Kārobār Ghaṭḍai. *Kāntipur*, 19 May, p. 19.
- Adhikari, Roshan. 2067 v.s. Gharjaggāko Samasyā Gahirīdo. *Kāntipur*, 22 Asar, p. 19.
- Amatya, Shaphalya. 1996. *Kāṭhamāḍauṃ Naḡarāyaṇa: Kāṭhamāḍauṃ Naḡarako Udbhav, Naḡarāyaṇa, ra Saṃskṛtiko Itihās*. Kathmandu: Nepal Rajakiya Pragya Pratisthan.
- Amatya, Shaphalya. 2011. *Archaeological and Cultural Heritages of Kathmandu Valley*. Kathmandu: Ratna Pustak Bhandar.
- Bista, Dipendra. 2012. Atikramit Bastī Haṭaune Antim Tayārī. *Kāntipur*, 12 February, p. 4.
- Gutschow, Niels and Bernard Kölver. 1975. *Ordered Space Concepts and Functions in a Town of Nepal: Bhaktapur*. Wiesbaden: Kommissionsverlag Franz Steiner.
- Kantipur. 2009a. Gharjaggāmā 25 Pratiśatbhanda Baḍhī Lagānī Garna Rok. 10 December, p. 19.
- Kantipur. 2009b. Real Estate ra Āvāsīya Karjāmā 25 Pratiśatko Simā. 18 December, p. 15.
- Kantipur. 2010. Kar Chalnesāga 56 Lākh Asul. 22 January, p. 18.
- Khadka, Ghanashyam. 2067v.s. Mecī Mahākālī Bastī: Paurakhī Gaū! *Kāntipur* (Koseli), 26 Bhadau, p. gha.
- Kunwar, Suraj. 2066 v.s. Kaṭhmāḍau Yas Varṣa 58 Aū Sthānmā. 13 Asoj, p. 4.
- Saurabh. 2012. Anucit 'Bālāju Bikṛī' Bāre. *Kāntipur*, 28 December, p. 7.
- Shrestha, Dambar Krishna. 2012a. Khatarā Dherai Tayārī Susta. *Himāl Khabarpatrikā*, 15–29 January, pp. 46–47.
- Shrestha, Dambar Krishna. 2012b. Bhīḍko Capeṭāmā Kaṭhmāḍau. *Himāl Khabarpatrikā*, 29 March–12 April, pp. 26–31.
- Simkhada, Dhruva. 2012. Rājdhānīko Chatpaṭāhat: Raithāne ra Nawasāmbhrāntābīca Dwandwa. *Kāntipur*, 30 October, p. 7.
- Slusser, Mary S. 1982. *Nepal Mandala: A Cultural Study of the Kathmandu Valley*. Princeton: Princeton University Press.
- Subedi, Bhimprasad. 2068 v.s. Yasto Cha Kāṭhmāḍau! *Himāl Khabarpatrikā*, 16–30 Chait, pp. 34–35.
- Tiwari, Sudarshan Raj. 1992. No Future for an Urban Past. *Himal* 5(1): 5–7.
- Tiwari, Sudarshan Raj. 2001. *The Ancient Settlements of the Kathmandu Valley*. Kathmandu: Centre for Nepal and Asian Studies.

Tiwari, Sudarshan Raj. 2002. *The Brick and the Bull: An Account of Handigaun, the Ancient Capital of Nepal*. Kathmandu: Himal Books.

Urban Space Improvement Initiatives. 1997. Proposal on Public Space submitted to Kathmandu Metropolitan City. Proposed by Biresh Shah, Sanjay Thapa, Deepak Pant, Sunil Shrestha, Kathmandu.

### **Biographical note**

Biresh Shah studied at the School of Planning and Architecture, India and the Massachusetts Institute of Technology, USA. He has practiced and taught architecture, urban design and conservation, and urban planning in Kathmandu for over twenty Years. He taught in the Architecture and Urban Planning Programs at the Tribhuvan University, from 1996 to 2008. He has also taught Design at the University of Melbourne and School of Planning and Architecture (SPA), New Delhi. He is the Founder/Director of ARCHIPLAN, architecture and planning consultants, a practice started in 1999. Since 2011, he has also been working on the planning and design of South Asian University Campus Project in New Delhi, a project that was awarded from an international design competition. Email: biresh.shah@gmail.com

