

Squatter Settlement of the Kathmandu Valley: Looking through the Prism of Land Right and Tenure Security

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Abstract

Rapid urbanisation, low socio-economic growth, inadequate capacity to cope with housing needs and poor governance has caused increase of urban poverty and slums and squatter settlements in the Kathmandu valley. The poverty alleviation strategy, National Shelter Policy 1996 and the land and housing development trend has ignored the urban housing of poor. Detail analysis of the four cases of slum and squatter settlements of the valley reveals that such part of the cities are not recognised administratively but legitimatised socially through provision of amenities by public, non-government organisation and donor agencies. Within informal land tenure, there have been activities of selling and renting houses and lands in these illegal occupations. Households in larger and old neighbourhoods with strong community organisations such as Shankamul Squatter Settlement (SSS) and Ramhiti Improved Squatter Settlement (RISS) have higher perception of social acceptance and hence their shelters and neighbourhoods are comparative better than the newly formed Paurakhi Basti Squatter Settlement (PBSS) and Slum at Dhaukhel (SDK). However, lack of land right and tenure security has constrained for better life. To reverse this situation, integration of both 'top-down' strategy and 'bottom-up' approach is essential. Different forms of land tenure - community trust, long term lease, rent to purchase – should be granted to squatter after classifying them based on their characteristics, which will assist them for construction of safer and affordable housing and easy access to financial market. Fake squatter settlements should be removed by giving inhabitants temporary occupation certificate whereas genuine settlements should be relocated on safer sites. Policy interventions at national level for linking poverty alleviation strategy to urbanisation and urban housing, decentralisation of business activities from the valley, incorporation of land and housing units in the land pooling and private housing schemes including supply of affordable housing are also required to complement the management of slum and squatter settlements. Coordination and cooperation among local municipalities, squatter communities and third party (NGOs, CBOs, and donor agencies) is also suggested for collaboration of funds and programs and their effective implementation.

Key words: Slum and squatter settlements, Land right, Tenure security, Kathmandu valley, Poverty, etc.

Overview and Study Objectives

Rapid urbanisation, inefficient land administration and inadequate capability to cope with the housing needs of people in urban areas have contributed to the development of informal settlements (UNECE, 2009), which is a common phenomenon in all Third World Countries (Abrams, 1964; Payne, 1977; Lloyd, 1979; O'Connor, 1983). Such settlements popularly known by different names in different countries have common features - substandard shelter, inadequate basic amenities, unhealthy neighbourhoods and hazardous sites. Due to illegal land occupation, they have to live daily with the perpetual fear of eviction and demolition by authority, besides threat of natural disasters such as flood, landslides and earthquake.

Land, immobile and permanent, limited in quantity is essential to all human activities, whose values are depended on socially created demand and publicly provided services. Access to land has continued to be a tool for obtaining social prestige, economic security and political power. System

of land right and tenure security is the prerequisite condition for provision of housing particularly for urban poor. Though increasing urban poverty and growing number of slums and squatter settlements has become a global issue (UN, 2003) initially policies only dealt with ready-made housing and construction of houses based on self-help. Similarly, squatter settlements were eradicated and relocated during the 1960s and '70s (World Bank, 2002) as they were often viewed as threats of crime, disease and revolution (Perlman, 1976). Gradually the emphasis shifted to include the land issue and housing finance and the squatters were either redeveloped or upgraded. Still the focus has always been on informal settlements of slums and squatters with little integration with urban poor and their access to use and enjoyment of land.

Low socio-economic growth, poor infrastructure, rapid urbanisation including poor governance has caused urban poverty and increased number of slums and squatter settlements in the Kathmandu valley. Informal settlements as the result of poverty and manifestation of social injustice have covered a wide range of low-quality housing conditions: in particular slums (formal buildings dilapidated due to age and neglect) and squatter settlements (settlements characterized by unauthorized land occupation, lack of a building permit and/or a violation of building and planning regulations). In Nepal, 30,381 people were identified as landless family and 41,035 were identified as informal settlements (Landlessness Solution High Level Commission, 2000).

To address this situation, the government of Nepal has been responding through implementing housing for urban poor project, improving squatter settlements, formulating legislation and encouraging private sector for housing construction with varying degree of success. Against such background, this paper aims to analyse the squatter settlements of the Kathmandu valley from the perspective of land right and tenure security with fourfold objectives. First, it studies urban poverty in Nepal, identifies the housing deficit and presents the growing number of squatter settlements in the Kathmandu valley. Second, it analyses the existing slum and squatter settlements focusing on land tenure and property right and their numerous implications. Third, it critically reviews the land development and housing construction trend including squatter improvement works, carried out in the valley. Fourth and last, it presents an alternative solution for land right and tenure security for squatter settlements and proposes some key strategic recommendations.

Urban Poverty, Housing Deficit and Squatter Settlements of the Kathmandu Valley

Nepal is a landlocked country with 25 million populations living over an area of 147,181 square kilometres (CBS, 2006). Its per capita income was just US\$278 in 2003-'04 (CBS, 2004). The urban growth rate in Nepal (6.6% per annum) is among the highest in Asia and the Pacific region (ADB/ICIMOD, 2006). The urban population has increased thirteen-fold and the number of municipalities almost six-fold in the period of 50 years. Internal migrants to urban areas have increased over time from 13.4% in 1971, 16.3% in 1981, 17.2% in 1991 and 26.8% in 2001 (KC, 2003; CBS, 2002). Though urbanisation is about 19% at present in Nepal, population growth in the Kathmandu valley is as high as 7% per annum, three times higher than the average national growth rate of 2.3% per year. Out of 2.18 million population of the valley (ISRC, 2008), the five municipalities alone accommodate about 30.9% of total nation's urban population. The valley's settlements have tripled from 104,993 houses in 1979 to 345,562 houses in 2001 and the built-up area has expanded five-fold from 1955 to 2000. It has been facing rapid urban growth over the last three decades (Haack & Rafter, 2006; Sharma, 2003) with population density of 2,739 person per square kilometer (CBS, 2003). The growth pattern has been influenced by at least seven factors: physical conditions, public service accessibility, economic opportunities, land market, population growth, political situation, and plans and policies (Thapa & Murayama, 2010).

In Nepal, the poverty line calculated using the 'head-count measure' requires 2,124 kcal per capita per day and other non-food price indices adjusted based on urban consumer price index of the

Nepal 'Rashtriya' bank (Central Bank) comes around NRs. 7,696 per person per year: NRs 7,901 for urban areas and NRs 11,057 for Kathmandu (CBS, 2005)¹. The government's poverty alleviation efforts in Nepal in three phases – implementing various programs by bureaucrats working at different ministries and departments in the 1970s and 1980s (Gautam, 2007), involvement of non-government organisations and donor agencies from 1990s and establishment of Poverty Alleviation Fund in 2003 (PAF, 2003) and highest priority in the Tenth Development Plan: 2002-2007 (NPC, 2002) - have gained significant success in rural livelihood improvement, access to water and sanitation, and so on (Nepal Rastra Bank, 2008) but little impact on housing sectors of urban poor living in slums and squatters. High illiteracy, poor health and low sanitation, low food grain productivity, high child malnutrition, poor access to basic services and inequalities resulting from a tradition-driven social structure are reasons behind poor performance (IMF, 2005). The gap between the advantaged regions or caste/ethnic groups and the disadvantaged is either widening or remains constant. Thus, the 'Dalit,' Muslim and 'Janjati' who have had lower levels of human development for generations, continue to suffer today (UNDP, 2009). Even after five decades of planned development, one third of Nepalese are still living in absolute poverty, deprived of basic amenities of life such as foods, cloths, shelter, health, education and drinking water (PAF, 2003). The poverty level has remained almost the same figure in the last thirty years: from 33% in 1976 to 31% in 2006 (Table 1). In absolute number, the population of poor has increased. Another survey reveals 13% of people and 8% of households below the poverty line in Kathmandu (LSGS, 2005). Recent study based on combination of different indexes on quality of life has projected 65% of Nepalese as poor. The 'Gini Coefficient' (poverty indicator) of 0.34 in 1995-'96 rose to 0.41 in 2003-'04 clear indicates the growing gap between the rich and poor. The reduction of poverty between the 1995-'96 and 2003-'04 was mainly due to contribution of labour and increase of remittances rather than the country's success in development performance.

Table 1 Population in percentage under poverty line in Nepal

<i>Year</i>	<i>1976</i>	<i>1985</i>	<i>1995</i>	<i>2002</i>	<i>2006</i>
People under poverty line	33%	41%	42%	38%	31%

Source: CBS, 2006

There had been housing deficit for 242,724 persons in the country even in 2001. With the population growth rate of 1991 (i.e., 3.83%), the projected population in 2011 will be 2, 357,312 and in 2021 will be 3,434,100. With household size of 5 till 2011 and 4.5 from 2011 to 2021, the total dwelling units needed till 2021 will be about 435,662 number, i.e., 15% of the total population of the valley in 2001 (KVTDC, 2000) (Table 2). Even assuming the constant growth of the urban poor of 3.3% at present rate, an additional of 14,376 dwelling units are required to house about 113,325 number of urban poor by 2021.

Table 2. Required dwelling units for extra increased population by 2021

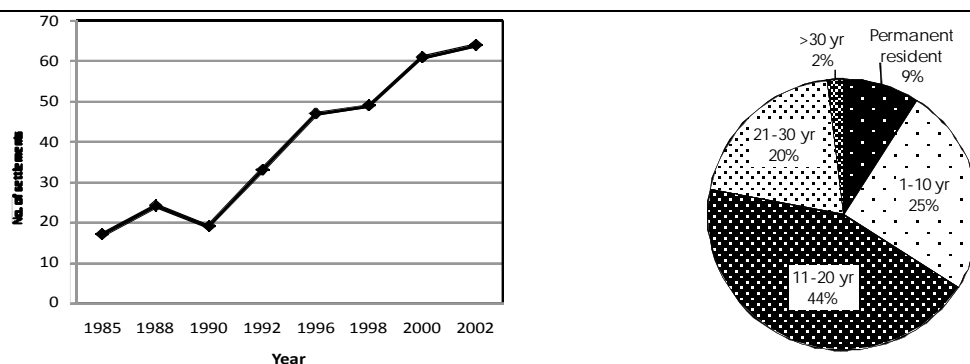
<i>Particular</i>	<i>Extra population</i>	<i>Persons/ household</i>	<i>Dwelling units needed for urban poor (below absolute poverty line)</i>	<i>Need of dwelling units in total</i>
Housing deficit till 2001	242,724	5	1,602	48,545
Extra housing needed	739,153	5	4,878	147,831

¹ At present, US\$1 = NRs. 73.35 (approx)

from 2001 to 2011				
Extra housing needed from 2011 to 2021	1,076,788	4.5	7,896	239,286
Total housing needed till 2021			14,376	435,662 (15% of total pop. of the valley in 2001)

Source: Modified from KVTDC, 2000

Rural - urban migration for employment, health, education and other facilities, rapid escalation of prices of land, housing and rents coupled with government’s failure to supply adequate land and affordable housing including poverty, unemployment and low wages have compelled those poor and unskilled migrants to squat and build their shelters on public land and other environmentally sensitive areas like riverbanks or flood plains, steep slopes and vacant spaces under high voltage electrical transmission line in the Kathmandu valley. Many of them in such settlements have their local name and own administrative division with their own rules and regulations to govern the community (Paudyal & Mcdougall, 2010). There were only 17 squatter settlements in the valley in the 1985 whereas it increased upto 64 numbers by 2003 (LSGS, 2003). They are characterised by wide variations in terms of location, age of the habitat, housing typology, neighbourhood facilities, delivery system, population density and background of the squatters. Out of 40 squatter settlements of the Kathmandu valley, at least 24 are located along the five rivers of the valley (LSGS, 2008). Squatter settlement at Balkhu comprises of 296 households with population density of 1,300 person per ha whereas settlement of Kuriyagaun has just 11 households with population density of 728 (NEST, 2010). About one fourth of the total squatters of the valley is illiterate and more than half of them are either just literate or have primary level education (LSGS, 2001). Nearly two third of them are labour working in factory, restaurant and offices including daily wage basis. In the span of 18 years, the squatter population increased from 2,134 to 14,500, almost sevenfold (Fig. 1a). Most of them are living in the settlement for a long time around 10-30 years (Fig. 1b). More than half of the population in large squatter settlement close to urban centre is the migrants or low income group displaced from the city core itself while converting the ground floors occupied by them into shops (Backe-Hansen, Olav et al, 1985). Such settlements demonstrate failures of both existing markets and of governments to respond to citizens’ demand for essential services (Kessides, 2001).



(a) Growth of squatter settlements in the valley (b) Age of the squatter settlements of the valley

Fig. 1. Growing number of squatter settlements and their ages in the Kathmandu valley

Case studies of Squatter Settlement of the Kathmandu Valley

Urban poor of the Kathmandu valley living in four different conditions namely (a) Shankamul Squatter Settlement (SSS), (b) Paurakhi Basti Squatter Settlement (PBSS), (c) Ramhiti Improved Squatter Settlement (RISS) (d) Slums area at Dhaukhel (SDK) are analysed in detail through a

structured questionnaire survey² (altogether twenty to thirty questions under four different subheadings) and field visit (Table 3). Data collection includes personal information along with physical and infrastructure condition, socioeconomic situation of dwellers and their views towards improving settlements and living standards including land tenure and property right. Numerous formal and informal meeting and discussion were also held with the concerned stakeholders working at public, private and non-government organisations.

Table 3. Contextual background of the case study settlements of urban poor in the Kathmandu valley

<i>Case study areas</i>	<i>SSS</i>	<i>PBSS</i>	<i>RISS</i>	<i>SDK</i>
Location	Shankamul, Ward no. 10, Kathmandu	Thapathali, Ward no. 11, Kathmandu	Baudha, Ward no. 6, Kathmandu	Dhaukhel, Ward no.14, Kathmandu
Established	> 20 years (old)	< 5 years (new)	> 20 years (old)	> 20 years (old)
No. of household	120	366	127	26
Total population	660	2,196	749	Not available
Ethnic groups	Mix of different ethnic group	Mix of different ethnic group	Mainly Gurung & Rai caste	Mainly Khadgi & Sahi caste

Access to secure land and shelter is widely accepted as a precondition for access to other services and livelihood opportunities (Rakodi & Lloyd-Jones, 2002), which helps to reduce urban poverty (DFID, 2002). Tenure security depends not only on secure and well-defined rights, but also on a host of cultural, political and historical processes and administrative practices (Doebele, 1987). In Nepal, six forms of earlier land tenures recognised as *Raikar*, *Birta*, *Jagir*, *Rakam*, *Kipat* and *Guthi* land (Tuladhar, 2005) were later converted into two types: Guthi lands and Raikar (private or public) land. Another form of land tenure is non-formal, *de facto* tenure. The non-formal tenure refers to squatting where land is acquired, occupied and used without permission from its owner, whether a public body or private person. Except the case for SDK, land tenure in the remaining three cases belong to non-formal type without legal title. Within this tenure type, there are wide variations. In the case of SSS, though majority of the occupants are owners living in self-constructed houses, about 17.39% of the occupants have purchased the house from others and about 8.70% of them are living on rental basis (Table 4). Similarly, in the improved squatter settlement of Ramhiti, 13.89% of them have purchased the present houses and about 8.33% of them are still renting the accommodation.

Table 4. Comparative study of different provision within non-formal land tenure

<i>Squatter settlements</i>	<i>Self-constructed</i>	<i>Purchased</i>	<i>Rented</i>
SSS	73.91%	17.39%	8.70%
PBSS	100%	0	0
RISS	77.78%	13.89%	8.33%
SDK	90%	0	10%

Variation in ‘informal land tenure’ has numerous consequences. First, most of the squatters living in SSS and RISS have perceived high level of ‘*de facto* land tenure’ due to combination of three factors. First, they have been staying in the present location for more than two decades. As the

² Though it was intended to carry out survey for 50 households in each case, due to site context and other technical difficulties, only at PBK, 50 households were interviewed and in the remaining, 30 households at SSS, 36 household at RISS and 20 households at SDK were respectively interviewed in detail. Except few items by few households, all the questions were answered and the analysis is based on the filled up information.

squatter settlement grows over a long period, the residents start to assume that they will not be evicted, unless there are very clear signals of an impending eviction. Second, their size of settlements is comparatively large and their community organisations are stronger, sufficient to oppose any forced eviction. Third and last, they have taken the provisions of drinking water, toilet construction and footpath pavement by a non-government organisation, Lumanti Support Group for Shelter (LSGS) with financial support from different donor agencies and Department of Urban Development and Building Construction, Government of Nepal as indirect acceptance of their illegal occupations. In the case of PBSS, the reaction is mixed. Being a new neighbourhood of less than 5 year, some households have perceived possibility of forced eviction in future; others have demanded for better facilities in the present locations. Still, others have expressed willingness to resettle in other location but all free of cost. In the case of slum area at Dhaukhel, some of the house owners are yet to get land title. Second, such form of land tenure has a significant impact on housing condition and physical infrastructures of the neighbourhoods. Housing situation is better in the old neighbourhoods compared to newly formed one. About three fourth of houses at SSS and RISS are more than 16 years old (Table 5). Due to old settlements, the LSGS has also assisted in provisions of toilet and drinking water and formed the women cooperatives in these two cases thereby boosting moral support of households.

Table 5. Age of the houses in the slum and squatter settlements of the Kathmandu valley

Case study settlements	Age of the houses (Yr.)				
	0-5	6-10	11-15	16-20	>20
SSS	3.30%	6.60%	16.66%	70.14%	3.3%
PBSS	100%	0	0	0	0
RISS	5.70%	8.57%	11.42%	22.8%	51.44%
SDK	0	0	0	0	100%

The age of the settlements has also determined the use of building materials and construction technology. Diverse type of materials such as brick, hollow cement block in mud and cement mortar, wooden door and windows with glass have been found in the houses of SSS and RISS whereas temporary materials such as plastics, Corrugated Galvanised Iron (CGI) sheet, bamboo are being used for walls at PBSS. However, CGI roofing is common in all cases (Photo 1). Almost all the houses at SSS and PBSS are of one storey only whereas majority of them of 3-4 storey at SDK. Few houses at RISS are being built in reinforced cement concrete with 2-3 storey high.



(a)SSS

(b) PBSS

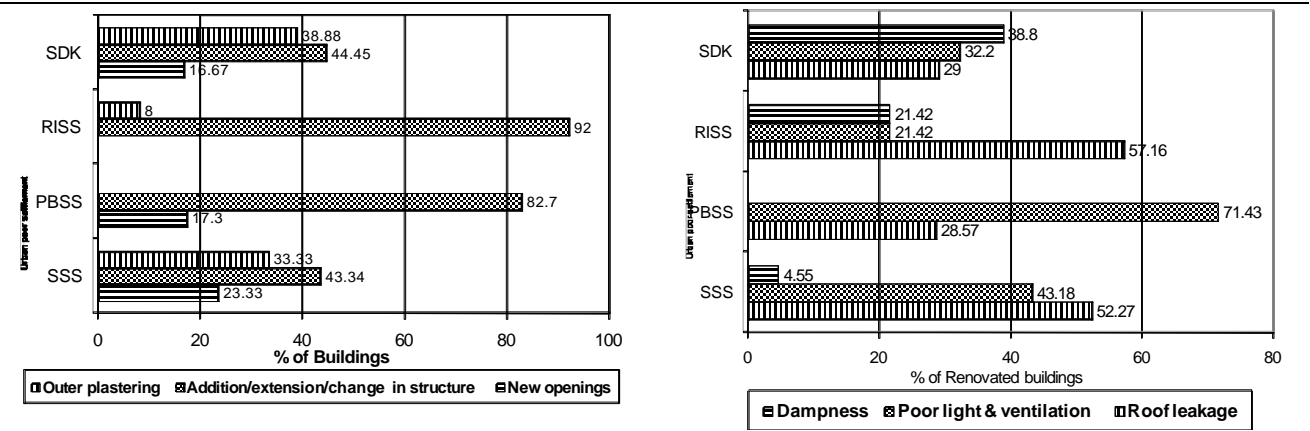
(c) RISS

(d) SDK

Photo 1. Variation in building material and construction technology used

When the fear of forced eviction is less, households often carry out numerous renovation works, as the case of SSS and RISS, which includes outer plastering and addition of room, construction of toilet and change in roofing materials (Fig. 2a). Inhabitants at PBSS have to change roof frequently due to its temporary nature. About 33.33% household at SSS and 38.88% household at SDK has plastered the outer wall. In the case of SDK, creation of opening on the front load bearing walls,

change of CGI roofing are the major renovation works carried out in the past. Except the case for RISS, less than one fourth of household has created new openings in their houses for better light and ventilation. Due to lack of land tenure, they are reluctant to go for vertical expansion with permanent building construction and other major renovations works. As a result, they are facing in all the four cases the problems of roof leaking, poor light and ventilation and dampness (Fig. 2b). More than half of the households at SSS (52.27%) and RISS (57.16%) are facing the problem of roof leaking in their houses whereas these figures are almost half for the cases of PBSS and SDK. Amore than two third of the households fell poor light and ventilation at PBSS.



(a) Renovation work carried out (b) Physical problems in the houses
Fig. 2. Physical character of the houses in the study areas

Despite illegal status, households in the three squatter settlements with support from LSGS and donor agencies are able to fulfil basic needs of access to water supply and sanitation whereas such facilities are inadequate at SDK (Photo 2). They often collect water from the community tanks located at different places for drinking purpose. Hand pumps and wells are being used for washing and bathing. As such provision is missing and the municipal supply is inadequate, households at SDK are facing acute shortage of water. Lack of provision for water and electricity has made the life hard at PBSS.

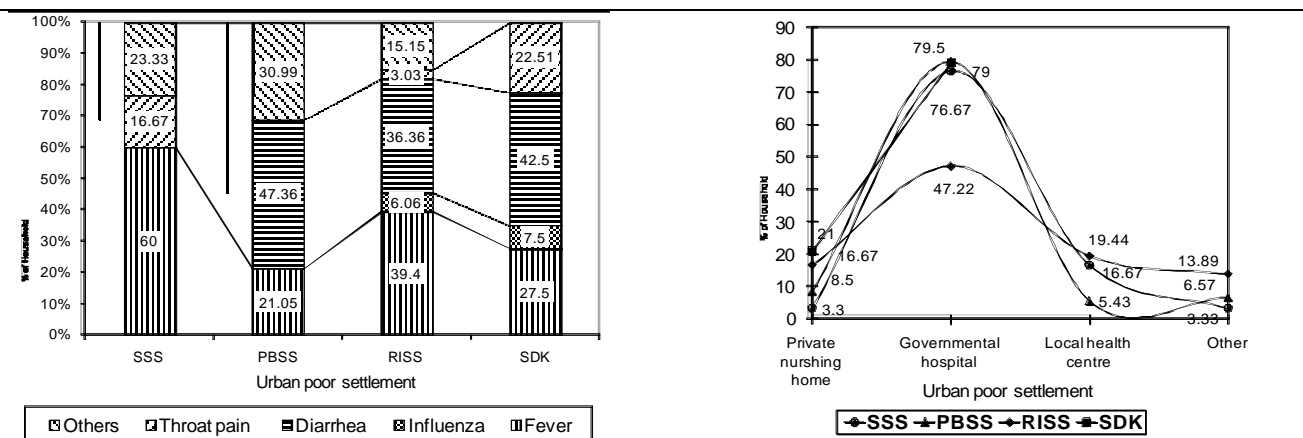


(a) Water tank at SSS (b) Water tanks at RISM (c) Hand pump at RISS (d) Household toilet
Photo 2. Provision of water tanks, hand pump and toilet construction by LSGS

Third, though squatter housing did not conform to acceptable standard and development approval from the municipality, both interior and outside spaces have been used in the best way to suit their lifestyles. Using the same space for multiple activities and setting their belongings accordingly has reduced the feeling of congestion and densification. The living room acts as working areas, family gathering and guest reception in the morning and day time and for sleeping

place at night. The male members of the family generally spend a large part of the day at work or in the public space, whereas females often perform some income generating works at their houses, in addition to sleep and store their possessions. Fourth, numerous community organisations such as Squatter Organisation, Ramhiti Neighbourhood Improvement Committee, ‘Ama Samuha & Bal Bikash’ (Mother Group and Child Development), Women Saving Cooperative including ‘Guthi Samaj’ at RISS and ‘Gyan Jyoti’ Female Cooperative, ‘Mahila Yekta’ (Female Unity) Group, Buddha Marga Neighbourhood Development Committee at SSS are supporting their households in many ways. Money needed for minor improvement of houses, treatment and educations are often borrowed from friends and relatives, neighbours and cooperatives. Since the cooperatives and community organisations are not so strong in the remaining two cases, they have to depend on either cooperatives outside their communities or their friends and relatives for financial assistance and other helps. Fifth, despite wide variation in monthly income households at SSS and RISS have comparatively better position due to working of females members at their houses. Such activities are not possible in the case of PBSS due to poor condition of house and lack of electricity. Households living in SSS and RISS have cooperative attitude whereas those occupying at PBSS are comparatively difficult to deal with. Discussion with local leaders and other concerned agencies revealed that most of squatters at PBSS are not genuine squatters but occupying the area under influence of some political parties.

In addition to these, these case studies have many common features. First, their expenditure pattern has similarities: the highest expenditure in food, followed by education and cloths with the lowest priority on health sector. Second, they used to suffer from various diseases related to bad sanitation and unhygienic environment such as fever, influenza, diarrhoea, and so on (Figure 3a). Except the case for SSS, more than one third of households in the remaining three settlements have suffered from diarrhoea. For treatment, majority of households visit nearby government hospitals, which are comparatively cheap (Figure 3b). About 21.00% of inhabitants of SDK and 16.67% of households of RISS rather prefer to visit Private Nursing Homes for treatment. Except the case for SDK, few households in each remaining cases have taken medicines after consulting sell-persons working at drug shops. Third, households in all cases are very much concern with education of their children. Majority of squatters except the case of SDK have sent their kids in the schools located outside the neighbourhoods, others have admitted in private boarding school.



(a) Various diseases in the community

(b) Places to go for treatment

Fig. 3. Comparative study of health situation in slum and squatter settlements

Fourth, community unity, convenient location and available public transportation are the major 'liking elements' of the neighbourhoods whereas 'alcoholism' and 'youth fights' are the most 'disliking' activities of the communities. They also believe that local government should assist them in finding jobs and income generating works, besides helping in securing land ownership certificate. They are also willing to improve their houses upon getting long term sufficient loan.

Public and Private Sector's Response to Housing for Urban Poor

The housing sector in the valley (and Nepal) has witnessed a series of trend both in the built form and implementation practice in the last few decades from subsidized government's housing production through site and services in the 1970s to land pooling projects in the 1980s and to private apartment construction in the 2000s. Implementation of the government's first housing scheme 'Kuleswore housing project' (on 26.5 ha of land) for those civil servants without house and land in the valley in 1977 through land acquisition could not success due to stiff resistance from the local land owners due to low compensation of their lands, displacement of the original land owners, poor technical and managerial capabilities of Kathmandu Valley Town Development Committee (KVTDC), lack of coordination among various line agencies for timely provisions of physical infrastructures, delay in construction (assume to be completed in 2-3 years but took more than 10 years) and hence overrun of the estimated cost. Another two models – Guided Land Development (GLD) and Land Pooling (LP) – were successful to open 300km road and able to develop about 240 ha of lands between 1988 to 2003 (KVTDC, 2002). In addition to these, the local real estate and individual land brokers have opened up more than 1,270 ha of land for residential purpose in Kathmandu and Lalitpur municipalities between 1971 and 1981 (Halcrow Fox et.al, 1991). After promulgation of Apartment Ownership Act 1997, many private housing and real estate companies started constructing private housing in the valley. As many as 150 real estate companies have already registered to Nepal Land and Housing Development Association till now.

This housing development trend has ignored the urban poor living in slums and squatter settlements in many ways. First, the ongoing land pooling programs and housing development have benefitted to local landowners and high income group only. Most of the occupants of new housing were those elite groups who already have houses in the valley. In fact, they consider housing as a business venture and investment object for future high value speculation. The market value of the serviced land returned to the landowners has increased as high as 300% to 600% (Karki, 2004). Government line agencies are providing services of electricity, telephone and water supply in the planned areas. However, urban poor living in scattered sites have to manage the cost of access road, septic tank and soak pit, and water pumping from the ground by themselves. The cost of the Community Housing (TCH tower III) at Panipokhari, Kathmandu developed by Comfort Housing Limited (private developer) ranges from NRs. 5,900,000.00 NRs. 9,300,000 per flat whereas the price at 'Guna Colony' (High Rise Apartment) at Sinamangal, Kathmandu ranges from NRs. 3,400,000 (850 sq. feet) to NRs. 3,900,000 (907 sq. ft.) for 3 bed room apartment. Second, numerous financial institutions including government and private commercial banks providing wider range of housing loans based on different schemes with long term repayment period are of little useful for low income group as they have nothing to deposit as mortgage in the bank. Urban poor hardly get benefit from offering individual loan of NRs. 300,000 – NRs. 500,000 with a payback period of five years by Nepal Housing and Merchant Finance Company Limited due to the policy that the borrower's income should be three times that of the monthly instalment of repayments. Third, though the government has acknowledged the need to address housing issue for urban poor in the National Shelter Policy 1996 and in the Tenth Development Plan (2002-2007), no policies and guidelines regarding how to implement projects benefitting poor are so far formulated. Poverty Alleviation Fund Board is more concerned with income generating programs rather than

housing and neighbourhood improvement. Moreover, the government's adaptation of National Building Code and provision of seismic design in structure of building while applying for building permit has little meaning for those living in slums and squatters, as such illegal settlements do not come under normal permit system and development control mechanism. Urban land assembly is complicated as well by the right of a tenant to stay on a piece of land if it is sold. The Land Ceiling Act obstructs achievement of economies of scale and difficult to recover the costs of infrastructure from small size of plots (Mattingly, 1994). Lack of information and reliable data of informal settlements has further constrained policies and programmes for upgrading and regularization of the areas.

However, the Kirtipur Housing Project comprising of 44 number of two storey houses in six ropanies of land was built to resettle those displaced squatters from the construction of Vishnumati Link Road. An Urban Community Support Fund (UCSF) in collaboration between Kathmandu Metropolitan City, LSGS and several national and international development agencies (LSGS, 2005). Water Aid was ready to support water and sanitation part whereas Department of Urban Development and Building Construction, Government of Nepal and UN-Habitat has assisted in stone paving and rain water harvesting respectively. Moreover, the community themselves took active participation from identifying genuine squatter and deciding a monthly payment of NRs 2000 over a period 15 years to monitoring and supervising the construction process. Though this project has demonstrated the success storey due to collaboration of funds and programs among different partners, nonetheless, poor space planning, long commuting distance for jobs at city centres, and social exclusion by the surrounding neighbours while collecting water from the public taps have diluted its achievement. The ownership of land remains with UCSF and thus sale is restricted although residents could still exercise limited right such as renting. In fact, the squatters' movement in Nepal, led by Squatter Federation (Nepal Basobas Basti Samrakchan Samaj), The Nepal Women's Unity Society (Nepal Mahila Ekata Samaj) and Lumanti Support Group for Shelter, has developed both national and regional networks through exchange visits with peer groups to share their experiences with savings and credit, upgrading housing, monitoring evictions and so on (Tanaka, 2009).

Alternative Solution for Land Right and Tenure Security and Recommendations

Slums and squatter settlements are seen at local scale but their root causes of the problems lie at national level. Poverty alleviation strategy, National Shelter Policy 1996 and present trend of housing development have failed to address the needs of housing for urban poor living in slums and squatter settlements of the Kathmandu valley. Detail case study of four slum and squatter settlements of the valley reveals that informal land tenure in different forms has significant impacts on shelter and neighbourhood amenities. Though such settlements are not recognised administratively provision of drinking water, toilet construction for household and community, pavement of the pedestrian lanes by public, non-government organisation and donor agencies has socially legitimatised. Moreover, larger size and old age of settlement with strong community organisation has further strengthened social legitimacy. However, the growing number of slums and squatter settlements should be managed: those artificial settlements should be cleared, vulnerable community of genuine squatter should be resettled and those neighbourhoods in safer location should be upgraded. Wide variations in monthly income, family size and background, ethnic group, size and scale of settlement, age and location and so on among households mean households have different priorities and needs in terms of tenure and property-based rights. Hence, detail analysis should be carried out for classification of the existing settlements. Depending on each case, they should be assigned for different form of land tenure – community, trust, long term lease and rent to purchase. After assurance of land right, slums and squatters will be able to mobile resources

themselves for safer and better housing, often in remarkably large amounts in relation to income. Recognition of shelters might be better than acknowledging legal tenure particularly for very poor not only because they may not be able to pay the land and property tax but also due to possibility of selling those lands and squatting another places. For those artificial squatters, temporary occupation certificate should be given so that they will be able to relocate other places in the given period. Fencing of the public lands along with signposts information, land using for some activity rather than left unattended, early occupation and adequate policing of acquired land will also prevent encroachment and illegal occupation. In addition to these, the following policy interventions are also recommended at national level, which complements the slums and squatter management at local level.

(a) Formulate integrate policy at national level for linkages of poverty alleviation strategy, urbanisation and urban housing, decentralisation of business activities from the valley, inclusion of urban poor in land pooling and housing programs;

(b) Build partnership among the concerned stakeholders for provision of low cost housing for urban poor: the government should provide affordable land in suitable locations and 'external' infrastructure development; low-income households should be encouraged and enabled to save and invest for the incremental development of their housing, while maintaining control over the construction and improvement process; non-governmental organizations should build the capacity of communities and communicate among different stakeholders; and the private sector should provide goods and services in lower cost; and

(c) Strengthen co-ordination and co-operation among non-government organisation, donor agencies, local government including households not only to empower and educate the local communities through income generating training, establishment of community credit and finance system but also to integrate the development fund and program for effective use.

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