

Challenges in Informal Settlement in Kathmandu Valley: A case of Sankhamul Squatter Settlement

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Abstract

Squatter settlements and slums became widespread in many developing world cities. Numerous squatter settlements have emerged in different urban centers across Nepal in the last two decades, with Kathmandu, the capital city. Increasingly, new migrants are clustering in diminishing prime open spaces and environmentally sensitive areas. Though the proportion of squatter housing is low compared to other Third World cities, it's growing rapidly. The paper reflects the current situation of the residents of Sankhamul squatter settlements on several dimensions to generate attention of the public and the authorities to resolve their issues. It accesses the question what planning interventions/approaches would be appropriate for challenges in infrastructure of the particular informal settlement? And the aim is to identify the challenges for infrastructure provision in the study area and develop the opportunities. Moreover, this paper suggests appropriate recommendations for controlling the proliferation of such settlements, their consistent marginalization and subordination from the general people and solutions to control them.

1. Introduction

Cities in the less-developed world are frequently characterized by high rates of immigration, as coupled with a widespread proliferation of slum and squatter areas. As such, a number of observers have suggested that rural-to-urban migrants are disproportionately likely to settle in low-income neighborhoods immediately on their arrival in the city [1]. Slum and squatters have increasingly emerged as one of the principal features of cities in many Third World countries. Slum formation is closely linked to economic cycle, trend in national income distribution, and in more recent years, to national economic development policies. Slum and squatter is an economic phenomenon as well as social and political circumstance. It represents urban way of life and growing rapidly in the urban growing cities. Due to illegal settlements dwellers of slum and squatter are excluded from urban facilities provided by government and local authorities and make environment for them to go to informal sectors. In the processes of urbanization and simultaneously increased rate of slum and squatter settlements, inclusion of low-income holder people and dwellers of slum and squatter seems to be raised.[2]

As one of South Asia's fastest growing cities, Kathmandu is experiencing rapid urbanization. Nepal is in the process of transitioning from a predominately rural to urbanizing economy, followed by mass rural-to-urban migration [3]. Individuals are pulled to Nepal's capital city for job opportunities, security and socioeconomic mobility. Kathmandu's urban development is unplanned, leading to uncontrolled urban sprawl, rising costs of living, exclusionary housing markets, inadequate supply of affordable housing, decreased livability and a loss of open space. Increasing trend in the number of the squatter settlement is one of the key issues related to uncontrolled urban growth in Kathmandu valley. In 1985 it was estimated that there were only 17 squatter communities in Kathmandu, but now the number has grown to 40. An increasing trend of these settlements has significant impacts in local environment of the valley, any plans and programs designed to improve the valley's urban environment must effectively address the issue of squatter population [4]. Ultimately, the consequences of unplanned urban growth contribute to the expansion of informal settlements occupied predominantly by urban squatters. The increased urbanization coupled with regional imbalance and the hope of getting

employment, security, and education attract the unskilled and illiterate people for migration to the city. The uncontrolled migration and lack of planned social housing schemes have forced the people to live in substandard housing condition and resulting emergence of squatter settlements [5]. Though it is an undeniable fact that urbanization, being an integral part of the development processes bring in its wake more opportunities and new potentials, yet the attendant problems are considered to be very acute and complex in nature. One such problem with which developing countries are grappling today is the problem of urban poverty [2].

2. Research Question and Objectives

The increase in squatter settlement have been a challenge to cities of developing countries and consequently efforts to sort out challenges associated with these slums have been left to planners and the planning authorities. In the process of trying to address this challenge various approaches to slum upgrading has been tried with the primary goal of making better the living conditions of slum dwellers. These approaches have had their challenges and effects hence a clear indication that Government, local authorities, planners and professionals in the landed profession are yet to demonstrate an approach that effectively and sustainably address issues of slums in urban areas.

The main research question focus on:

- What planning interventions/approaches would be appropriate for challenges in infrastructure of the particular informal settlement?
- The main objective of the research is to establish the opportunities and challenges for infrastructure provision in the study area.

3. Methodology

Since the research is the interpretation of the different principles and ideas regarding the upgrading, research generally focuses on “What” and “How” questions which answer will be the observed in the people’s perception. Therefore, the research paradigm adopted in this research will be interpretative paradigm. The positivist paradigm is a scientific research based on rationalist philosophy and in this paradigm the researcher must ask questions about nature and allow nature to respond.

The research involves mixed method research. Both qualitative and quantitative research methods including literature review, site analysis and questionnaire survey will be conducted during the research period. The qualitative research will help the study interpret the relationships between the study variables. The study will be qualitative because it will respect the characteristics of the descriptive research. On the other hand, the quantitative method helps to know the comprehensive experience of the topic under study. It also helped gather more information quantitatively of what has been learnt from the other sources. In this a particular study, program or event is studied in depth for a defined period of time to make comparisons, build theories or propose generalizations.

The methods adopted in the study are:

- Initially the general background for the study is made so that the research question is formulated with some of the questions to support the further study.
- The required literatures are studied and the synthesis of the materials is done keeping the useful ones and discarding which does not support for the progress of the research.
- The data area collected extensively on which the investigation is focused in the defined site.
- The data collected in the form of observations, interviews, documents, past records and audio-visual materials
- Data analysis steps like organization of the details about the case; categorization of data which involves clustering data into meaningful groups; interpretation of the data; identification of the pattern of the data; and synthesizing and generalizing the acquired data.
- On the basis of literature reviews and case studies, the research with some concrete recommendations is concluded.

From the above, Public space can be defined as a common area that’s not closed or blocked up and provides access for people to share. It’s space that’s shared with strangers, a representative place for enjoyment, gathering, politics, religion, commerce, sport. Public open space is an important part of a city with quality spaces having a huge impact on a city ranging overall areas including social, economic and environmental benefits. Open space can enhance the character of residential areas, civic buildings,

conservation areas and archaeological sites [6].

4. Site overview and Data

Today's slums are definitely many of the conditions present in cities in the middle ages, including a lack of basic service provision (such as: adequate clean water, sanitation and rubbish collection); substandard housing structures; overcrowding and high density; unhealthy living conditions and hazardous locations; vulnerability to exploitation; and of course extra legality informality and insecure tenure.

Squatters have encroached Kathmandu Valley's river banks for the last 43 years, but governments have failed to solve this issue so far. The last time the government tried to clear the river banks of the Valley in 2012, the squatters had attacked government authorities and occupied the banks. There were 1082 out of 8000 families who had registered as squatters with DUDBC in 2012. There are 73 places in Kathmandu and three places in Lalitpur and Bhaktapur have squatters' settlements. Among them Thapathali was the recent encroached river bank, which squatters occupied 10 years ago

The Sankhamul squatter community, settled along the banks of Bagmati River is one of the oldest squatter communities developed in Kathmandu, with some of the families living there for 37 years. It is located 3.5 km away from the city core in a rapidly growing urban pocket. The neighborhood surrounding this settlement also shares the same name Sankhamul which at present is a mixed residential and commercial zone. Also there are monuments of historic importance facing this settlement on the opposite bank of the River.



Figure 1: Sankhamul Informal Settlement

The settlement has a configuration of a tightly laid row housing having 1051 houses, stretched over the entire length of the land and occupies about 35,452 m² of land [7]. A black topped road along the stretch

of front facades provides easy access to each household. Each house though appears only as a small shack from road side, is a long narrow structure extending up to 20 m towards the river at the back. Interestingly, the portion of land, behind the built structures towards the river, has been separated out as a green belt by the community. Majority of households have small vegetable gardens at the back, sometimes for marketable production. Most of the families have toilets, electricity and water supply.

Apart from one recently constructed house which is permanent in construction, all buildings are semi-permanent structures constructed of bricks and mud mortar. These have corrugated zinc sheets as roofing material. Most of the houses are single storey, but few who have started to take loans from the cooperatives, have refurbished their houses to semi-permanent double storied structures, without any consultation from technical expert. Due to the small width of each house (average of 4m wide frontage) rooms are aligned one behind the other which is rather inconvenient. Although flooding of river water in summer does not have severe consequences, few houses at the end of the stretch which are closer to the river face problems of water entering the rooms. [8]

Sankhamul squatter settlement is the connection between the Kathmandu and Lalitpur district on the right bank of Bagmati River. The river originates at Bagdwaar on the northern hills of Kathmandu valley and flows through several important parts of Kathmandu including the temple of Lord Pashupatinath, the holiest Hindu temple in Nepal. The squatter settlement is occupied by a heterogeneous group of people irrespective of age, gender, ethnicity, caste and occupation. This area located just nearby the riverside is publically owned by the government of Nepal. In other words, the area is occupied by the residents without any formal legal claims, authorization or permission from the respective authority [8].

The study was done among the settlers and the sample of the study included the Government and the Non-governmental organizations involved in eradicating poverty in Sankhamul area and one-on-one interviews conducted with the beneficiaries. The major respondents were the residents in the research area. Similarly, other respondents included the various age groups and origin residing in the research area: older population and single women. The sample were identified for the

study in order to generate ideas that would reflect the current scenario of research topic in the study area. For this interviews and focus group discussion was carried out.

The sampling technique employed in the research study is purposive non probability sampling. The researchers narrowed down the sampling to heterogeneity sampling in order to address the diversity in order to generate ideas the status of the squatter settlers. These include respondents like children, older men and single women.

No of Households	105
Total Population	503
Average household size	5
Average Monthly Income of the Households	Min:25 cents Max: 175 US\$
Total Literacy rate of the community	79% of the total population
No. of households by construction type of house	Permanent-1 Semi Permanent-104 Temporary-0
Percentage of households by main occupation	Service-21% Small Business-13% Daily Wages-39% Others-27%
Percentage of households by main sources of drinking water	Tap Water (Stand Post)-12% Tube Well-88%
Percentage of households with and without toilet	Household without toilet-3% Household with toilet-97%
Percentage of households with/without electricity facility	Without Electricity-6% Electricity with meter-71% Electricity without meter-23%

Source: Lumanti, 2009 + Updates from field observation, 2010

Figure 2: House Data

Among the residents of the Sankhamul area, the majority of respondents were men whereas the minorities were women and children with 50 percent, 40 percent and 10 percent respectively. In the context of assessing the condition of the people residing in the area I have categorized it into various sub headings. Their brief description has been given in the following points:

- Age Group A majority of respondents were from 40-50 age group for responding and interacting. The rest included the respondents from 30- 40 age group with 33.50 percent, 20-30 age group with 21.20 percent and 50-60 age group with 6.20 percent.
- Educational Qualification A majority of respondents (80 percent) had no education at all. They had no opportunity to receive formal education whereas 15 percent studied till high

school and 5 percent till college. While the older generation were not able to receive any formal education, the area has a day care center where children below five years of age are provided with education informally. Two enthusiastic volunteers were involved in providing education to those children in the day care. This has had dual implications. First, the children have a proper care during the day time when their parents are out for work including proper meal and safety while playing. Second, the children receive primary level education in the meantime.

- Occupation When interviewed, respondents were found to have been involved in various occupation and income generating activities. Among all, majority were involved in construction activities that includes carrying loads (bricks, sand, mud, cement, stones and other materials), and constructing houses, bridges and likely work. They receive wages on daily rate and the total earnings exceed 20000 for those who work daily. On the other hand, some respondents who work half a year were reported to have been unable to perform the work daily because of their physical condition i.e., they complained of pain in the back and knee areas. Some were even reported to have been severely injured in the process. Various skill oriented programs have been conducted in the area to support their economic status and equip them with the complete support from local non- governmental organizations basically targeted to older women who are physically weak.
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5. Finding and Analysis

5.1 Housing Pattern

The settlement was mostly concentrated with temporary and impermanent houses ranging from brick made, cement made and mud made houses. No provision has been made to reconstruct those poorly constructed houses. Most of all, the houses

constituted of no insulation on the roofs and a minor coverage for rain and wind. Moreover, additional facilities around housing like sewage disposal and waste management was minimal.

Some respondents said that there was permanent housing before the demolition was carried out by the then Government of Nepal. In the process of which the locals were infuriated because there was no such arrangement for their resettlement. One of the respondents claimed that an NGO constructed new settlements as Ichangu for them in anticipation of a monthly paid rent which was unaffordable for them in absence of proper income.

5.2 Health and Sanitation

In spite of lower income to afford for advanced healthcare, the residents are able to go for health check-ups during the times when they are unwell to the nearest public hospitals. There has been no traces of any epidemics in the past. Moreover, there has been regular cleanliness and sanitation programs in the past to make the area cleaner and safe to stay.

5.3 Drinking Water

One of the primary concerns of the residents is the inaccessibility to safe drinking water. The people drink water from the tanker supplied by a donor occasionally. However, during other days, the people are forced to drink water from tube well.

This has definitely created dearth of safe drinking water as well as increased risks of water borne diseases due to contamination. Similarly, the accumulation of water during rainy season has increased the number of flies and mosquitoes in the area and susceptibility of people to diseases and infections.

5.4 Drainage / sewage disposal

The people had access to one toilet per household. Though the toilets were of no permanent nature, they do serve the need of the people. The toilets are shifted from one place to another to dispose the waste off. There is no open defecation found anywhere nearby the area.

5.5 Social protection

The residents who were eligible for social security allowances (the older generations) have not received

them and they had to go to the place of their origin to receive their amount. Other forms of social protection have not been provided to them.

5.6 Disaster

Sankhamul area is located in the peripheral area of Kathmandu by the riverside. The level of water rises during the rainy season. There is no occurrences of flood or any disaster in the area.

5.7 Role of NGOs/INGOs

Basically, the local NGOs are of good support to the residents of Sankhamul. They offer financial support, training for skill generation, cleanliness, health camps, clothes distribution, and likewise occasionally. Some of the prominent organizations included: Shakti Samuha and Saudaya Saarthi

6. Conclusion and Recommendation

Informal settlements are relatively new phenomenon in Nepal and the understanding, perception and awareness among the people related to its dimensions and consequences is very low. The proliferation of slums and squatter areas in the capital city is one of the acute problems affecting many: the residents as well as the outsiders.

Squatter settlers, prone to several dimensions of poverty, are often the most vulnerable sections of the society. Among the several dimensions comprises of: property rights and security of tenure, access to infrastructures and public utilities, health, social exclusion and crime and violence. (Helpdesk Nepal, 2016). Improving basic services like: drinking water, access to education, waste management, sanitation is some of the most important initiatives to be taken.

While significant differences have been realized as a squatter settlers and significant efforts have been put by the Government and other authorities for the resettlement of the people in the Sankhamul areas, there has been negligence on the sides of the residents too. It seems that they are not ready to get back to their place of origin and rather stay adamant in hopes and expectations of owning their space in the area.

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