

Managing Cultural Heritage of Ancient Settlement of Kisipidi through Urban Design

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Abstract

The cultural heritage of Kisipidi, a satellite newari settlement of Kathmandu constitutes the physical setting and socio-religious activities, which is linked by cultural practice in the form of daily ritual, celebration of various festivals, community's social norms including traditional social institution 'guthi' system. Though the town had been sustained for the last many centuries, failure to continue such practice in socioeconomic modernisation at present has resulted in formation of incompatible built form, decaying of community spaces, reduction in socialisation and religious activities and increase in environmental pollution. All these emerging problems are in the first stage of destruction. However, they can not be addressed through the existing legal and institutional framework due to its inadequacy and ineffectiveness. In such situation, integration of both 'top down' approach and 'bottom up' strategy by formulating conservation oriented development plan (and program) at town level and reviving socio-cultural activities at local level through urban design techniques is essential.

Keywords: cultural heritages, socio-religious activities, urban design, Kisipidi

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Overview, Objectives and Study Methodology

Kisipidi, a newari (indigenous people of the Kathmandu Valley) satellite town with agriculture based society lies 10km west of Kathmandu. Administratively, it includes the ward no. 1 and 2 of Mahadevsthan Village Development Committee (VDC), Thankot, accommodating about 1,644 people in eight different 'tols' (neighbourhoods) (MVDC, 2059). It mainly comprises of 'jyapu' community of Maharjan caste, which is rich in culture and traditional practice. As the residents of this town used to provide 'grasses' and 'sal wood' to the Royal elephants kept at Hanumandhowk Durbar Complex (Royal palace) in the past, its name 'Kisipuli' was derived by combining the two words: 'Kisi' meaning 'elephant' and 'Puli' denoting 'to pay back' in 'newari' language. 'Kisipidi' is the distortion form of earlier 'newari' name. Kisipidi represents one of the best examples of newari settlements in rural context with unique built form and cultural practice. However, rapid growth in the surrounding vicinity, gradual shifting of socioeconomic activities, migration of original inhabitants to city centres all have combined to transform the town. Lack of private investment and government's little concern has further limited the exploration of its cultural heritage at present. Against such background, this paper aims to focus on management of cultural heritage of Kisipidi through urban design technique with fourfold objective. First, it critically reviews various literatures and then identifies numerous salient features on physical setting and socio-cultural activities that represent the community's memory, value and identity. Second, it analyses the transformation of built form and society to identify various emerging problems as well as potentials. Third, it relates those shortcomings with the existing legal and institutional framework. And, finally, it proposes some key urban design strategy to mitigate those problems and to explore resources in socioeconomic modernisation of Kisipidi.

This study is based on the combination of critical literature review and different surveys. The town was visited many times to observe the use of public spaces and communities activities. A field survey to get resident's response was also conducted between Sept. 2008 to Feb. 2009 through a structured questionnaire, which includes 12 questions on

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physical aspect and 22 questions on socioeconomic issue. Out of 230 households only 168 households were interviewed, other being mostly uninhabited and few already migrated elsewhere. About 90% of questionnaires were filled up by them and the data analysed is based on those responded questionnaires only. Finally, local leaders, elders associated with various 'guthis' and VDC staffs were also separately interviewed.

Literature Review

Both the ancient artefacts of tangible (historic monuments, buildings, landmarks, etc.) (Ross, 1996) and intangible (atmosphere, ambiances, customs and belief, etc.) (Ashworth, 1997) types represent cultural resources. These different elements in various combinations produce the 'built form' of different scale, which provides invaluable information from different historical periods. Heritage is all the selected and interpreted remains from the past (Cantell, 1975; Larkham, 1996) in various forms with different social, cultural, traditional and political significance (Dobby, 1978; Stipe, 1983). Conservation of the past 'representational form' is required not only for retention of those old 'romantic' and 'artistic' values with 'variety' and 'richness' (Cantell, 1975) but also for 'good surrounding.' Combination of beauty, character, harmony, mellowness, mature landscape and human scale (Stipe, 1983) including achievement of the sense of place, stability, continuity and identity link people to the history and provide the sense of collective memory. Psychological reaction of human beings on spatial structures also constitutes the 'memory of place' and 'time' dimension adds the experience of places (Lynch, 1960, 1972). It is our responsibility to hand over the 'past' to future generation. Every place has its own individual special uniqueness, character and identity which distinguish it from other places (Norberg-Shulz, 1980; Garnham, 1985). A place is the past and the present with future scope possessing cultural and experiential values which provide meaning, order and stability to human existence (Lowenthal, 1975; Tuan, 1975). Hence, heritage includes not only historic towns with traditional character (Council of Europe, 1975) but also protection and management of 'physical structures and environmental relationships' and the 'maintenance of appropriate functions and

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traditional types and use' (Feilden & Jokilehto, 1998). It should be an integral part of coherent policies of economic and social development and of urban and regional planning at every level (ICOMOS, 1987). As conservation of historic town is concerned with the urban fabric as a whole and not with architecture alone (Cohen, 2001), urban design techniques are necessary for balancing conservation and development (Headman & Jaszewski, 1984; Varkki, 1997). It has function and economic potential (Poinsett, 1983; Steinberg, 1996).

Salient Features: Collective Memory and Community Representative

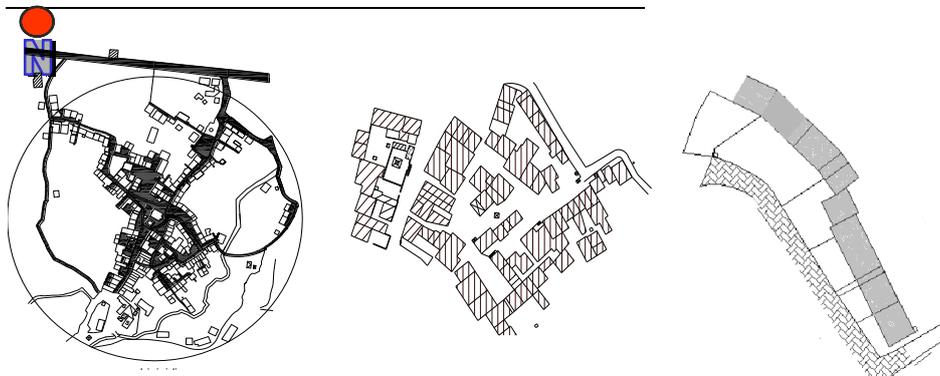
Numerous past artefacts associated with the history of Kisipidi, its physical form and various socio-cultural practices have provided collective memory, identify, uniqueness and sense of place. Some of them are visible in the physical form, others are intangible and again others are part of the daily life environment. Such heritage of collective memory and community representation needs to be conserved during the course of socioeconomic modernisation (Shrestha et. al., 1986; Haack & Rafter, 2006). This town was developed at the higher topography leaving sufficient lands for agriculture at lower level. Four gates at four cardinal directions were placed to protect the inhabitants from enemy as well as to mark the 'inner' and 'outer' part of habitat. The built form comprised of two basic elements - building blocks of three to four story attached houses clustered around the courtyards and network of open space and narrow non-axial streets – acting as a figure-ground for each other. Clustering of houses around the courtyard together with vertical oriented rooms had provided higher density and formed an enclosed community space. The tradition of keeping large open spaces (called khyo) for public benefit at the peripheral areas in 'newari' towns was also continued here.

The two streets running north and south as well as east and west have divided the whole settlement into four quadric with a square at the centre (Figure 1). This central public square housing series of important both Hindu and Buddhist shrines, 'patis' (public rest place), 'dabali' (square open platform) and an artificial square pond, has anchored eight different neighbourhoods, provided opportunity for socialization among different caste (profession) and communities and above all has

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symbolized the identify of Kisipidi. Four neighbourhoods namely Laybe, Pula cheen, Kyo cheen and Tare tole were developed in the earlier stage whereas the remaining four communities were extended in a linear form following the street pattern in four directions. Unlike completely ‘enclosed courtyards’ with continuous encircling buildings in the ‘newari’ town of urban areas, houses in this rural region have encircled the community spaces from three sides only leaving the remaining one side to merge with other courtyard (Figure 1). In some cases, the building blocks are surrounded by community spaces from three sides. Moreover, the living and working activities carried out in the second floor in urban houses are performed in the outdoor building front spaces here in Kisipidi. In rural society, the whole community act as a large family and hence public spaces are more meaningful compared to individual private space inside the buildings. Therefore, community spaces in front of individual houses are part and partial of building (and architecture) and without such spaces individual structure can not function as a house (Figure 1).

Figure 1: *Salient physical features on layout of Kisipidi*



Streets and open spaces of irregular shape and size following local topography (23.18% of total area of town) are not only ‘path’ for movement of pedestrians and goods, but they are ‘shared community spaces’ having symbolic, ceremonial, social and political roles (Photo 1). As such spaces are equipped with community amenities (well, public tap,

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etc.) and religious structures (temple, square platform, rest place, etc) (Hosken, 1974), they have become the stages for interacting different age groups at different period of time and seasons: worshipping place for old people in the early morning; grain drying and cloths washing venue for housewives in the afternoon; playing area for children and watching and conversation place for adults in the evening.

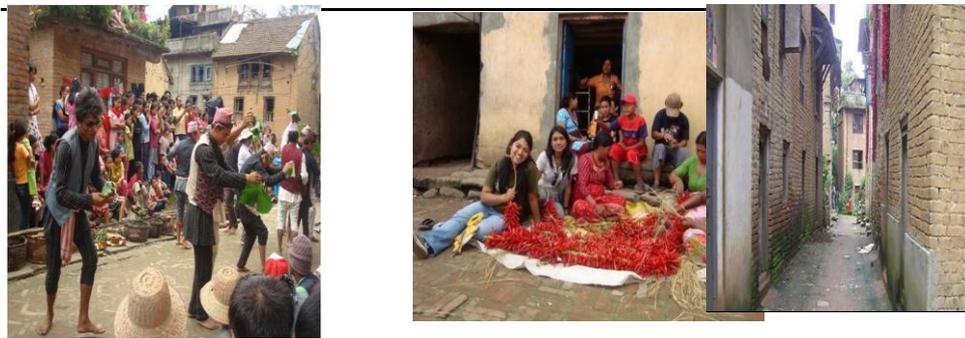


Photo 1: *Street as path as well as a sheared community spaces*

Moreover, there are fixed places to begin, end and stop religious procession during different festivals. This combined with the significant places like ‘chhwasa’ (a place protected by a demon) and ‘lachhi’ (private space in front of the house allocated for public use) has added cultural meaning to the streets and public squares. Finally, street width to building ratio within range of 1:2 to 1:3, unifying elements on building architecture – brick exposed façade, vertical oriented wooden windows and sloped roof with little variation on rooflines – have contributed to the formation of ‘sense of enclosure’ and ‘human scale’ for pedestrians. Visitors feel mystery, surprise, excitement and anticipation due to sequential spatial event and singular composition.

Common lifestyle, use of locally available building material together with similar construction methodology has led to uniformity in architectural styles with little variations only in material quality, workmanship and building façade finishing. Simple decoration around the windows and horizontal band indicating story differences illustrates the rural craftsmanship whereas temporary additional layer on the building façade – hanging off of agricultural products, which keeps on changing

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with seasons and the type of crops produced – provides dynamism in the streetscape (Photo 2). Moreover, there used to keep false window creating illusion for pedestrians. In the building, the top level and the ground floor acting as a buffer zone protects occupants from cold winter night. Warmer upper floors and courtyards are used during daytime. Minimum energy is lost due to heavy composite wall (sun dried and adobe), inside mud plaster, composite mud and wooden flooring.



Photo 2: *Salient features of traditional architecture in rural context*

Though the town is spatially and socially divided into different ‘tols’ (neighbourhood) based on the caste and lineage system (Levy, 1990), use of urban design techniques in space planning, installation of ‘ganesh’ image and performance of rituals and celebration of festivals are the three principles that has been combined to promote harmony between people from different classes and castes across different ‘tols’ (Photo 3). In fact, ‘tols’ are the extension of the houses where the families share their public interests and activities with the neighbours thereby merging the public and private lives. Community in Kisipidi celebrates almost all major newari festivals. However, ‘Bhairav’ ‘Kalika’ and ‘Ganesh’ Jatras are unique and place specific event, carried out once a year during ‘Ghoda Jatra’ festival (March – April). These gods and goddesses enjoy a twofold representation: the iconic version is kept on the first floor of ‘dyo chhen’ (god house) and not accessible for general public whereas the non-iconic representation in the form of rock or stone is housed in an open chamber, accessible throughout the year. Images of Kalika and Ganesh from the temples and that of Bhairav idol from ‘Guthi ghar’ are taken out for the procession to the ‘pith.’ They follow different routes: Ganesh takes the

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main front gate whereas Bhairav and Kalika follow the back gate along the funeral route before reaching the pith. Such procession has two symbolic meanings: ritual fortification of the settlement and reunion of gods and goddesses with iconic and non-iconic representations.

According to the legend, Bhairav from Nuwakot district (northern part of Nepal) was brought to this village in ancient time and since then this festival also known as 'Ghampo Jatra' has been celebrating in this place. Continuation of such religious works including renovation of monuments were carried out through social institution called 'guthi,' which was a corporate body financed to perpetuity through land grants or other fixed deposit.



Photo 3: *Ritual fortification of different neighbourhoods within the town*

In the past, water needed for irrigation had been brought to the settlement through long distance canal 'rajculos' starting from the foothills (Becker- Ritterspace, 1994), whereas provision of drinking water had been fulfilled by constructing ponds, deep well as reservoirs and depressed pit conduits 'dhunge-dharas.' Combination of different rituals and religious belief had kept water sources pollution free. Individual people considered 'naaga' (serpent) as a source of water and believed that anyone agitating the 'naaga' by polluting the water sources would suffer from skin diseases and infections. In addition to these, use of black clay, compost and human excrement as manure, maintenance of quality soil, seeds and indigenous methods had significantly increased the agricultural products. The by-product of agricultural waste had been used for live stocks and animal husbandry. Cow and buffalo dung were used for alternative source of energy by mixing with the straw and then drying

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them in the Sun. Provision of 'saagah' (dumping pit) at the back of the house and 'nogah' within the house on the ground floor in traditional houses for dumping the kitchen waste had kept neighbourhoods neat and clean. Finally, the construction industry dominated by natural materials such as mud, wood, bamboo, stone and so on were always recyclable. Use of indigenous technology was environmentally friendly.

Transformation of Built form and Socio-economic Activities

Numerous activities associated with transformation of built form and socio-economic functions are responsible for degrading the cultural resources of Kisipidi. First, social system of dividing parental properties equally to children, fragmentation of agricultural land and increase in family member all have encouraged vertical division of traditional houses. Additions of floor on the existing structures were needed to increase habitable rooms. Creation of door and window openings haphazardly on the load bearing front walls, addition of Reinforced Cement Concrete (RCC) floor on the mud mortar walls and random infill development of new RCC structure often 'unfit' with the surrounding buildings in terms of scale and proportion, architectural style and detailing have not only destroyed the traditional character of houses and streetscape but have also significantly increased earthquake vulnerability. According to questionnaire survey, Kisipidi comprised of nearly 60% of renovated houses with 29% of new infill development. Among the renovated structures, 13% constituted of modification of door and window openings, 18% comprised of simply cement plastering on outer walls and 45% accounted for addition of new floors with the remaining for other repair works. About 54% of inhabitant preferred to have new RCC construction for their new houses due to durability, need of little maintenance and less space for walls and easily available material. The survey also revealed that nearly one third (29.1%) of houses were more than 50 years old and more than one third (35.60%) of structures were of less than 15 years old. More than 29% of inhabitants complained of roof leaking and the same percentage also felt the problem of dampness. Only 9% raised the issue of poor light and ventilation in their houses. Similarly, nearly two third

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(64.86%) of occupants thought that their dwellings were not safe against the seismic hazard.

Second, demise of 'guthi' system, erosion on social norms, spiritual values and religious belief together with migration of original inhabitants into nearby cities and replacement of them by new comers of different profession and caste have hampered the cultural practices and diluted the social bonding with many negative consequences. Reduction in religious activities has made cultural spaces obsolete. Monuments such as temples, sunken stone spout and rest houses are in dilapidated condition due to lack of funding. Temples and 'patis' are no safer nowadays and hence they are often fenced by iron bar with lock in the main gate. Various activities used to take place in community spaces have been transferred into the top floor of the buildings, often kept flat in these days. Conversion of ground floor of the houses even located inside the courtyard into shop has also hampered the socialisation activity in the community spaces. Instead it has encouraged conversion of community spaces into parking lots. Such problems have also been raised by the community during the survey. More than half of the inhabitant (52%) felt inconvenience in performing cultural and religious activities due to poor maintenance of temple complex whereas about 39% mentioned the problem because of poor facilities and services. In the last 15-20 years, the community also experienced numerous changes in the cultural practices such as reduction in rituals and religious functions, less enthusiasm among younger generation in newari culture and celebrating different festivals. About 75% of the respondent felt that the local community themselves were responsible for degrading cultural properties with only 20% blaming for the government. Similarly, socialisation among neighbours for various community activities was also reduced: only 19% 'frequently' visited various places, 43% visiting 'occasionally' and the remaining 32% not visiting any places at all. Alcoholism (42.22%) and theft and robbery (48.88%) were the two major social problems that happened sometimes in the neighbourhood. Though the major occupation in the past was agriculture, only 45% of the inhabitant was continuing this job at present along with other side jobs to sustain their families. Moreover, about 26% were engaged in private sector, 12% in government job and only 6% in

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local home industry. Income generated from agriculture sector accounted 45% with 39% from service, and 6% from rent. Finally, separation from joint family, need to do job and join higher education, poor light and ventilation, construction of new house in other places and above all lack of job and economic activities were various reasons cited by community for leaving Kisipidi.

Third, open drain system, cleaning of utensils in the central pond and public taps, washing of cloths in the rivers and haphazard dumping of waste in the public open spaces and the street corners all have dramatically increased environmental pollutions. The survey revealed that about 14.84% of resident simply disposed their waste in public areas, 8.25% in 'saagah' or 'naugah,' 44.93% in kitchen garden and the remaining 30.96% in river bank. However, regarding overall infrastructure, only 24% of community was not satisfied. The remaining mentioned them either as good (27.0%) or just O.K. (44%). About 35% of town dwellers acknowledged that access to social amenities was easy and 40% felt that they were conveniently located whereas 42.5% mentioned the location of those social amenities inconvenient and difficult to access. Still 40.27% used wood as a fuel for cooking and other purposes at their houses. While asking for the three 'most liking things' in their locality, the inhabitants mentioned the cultural, social and environmental aspects. Existence of Kalika Temple and other Hindu and Buddhist statues together with the pond, celebration of Bhairav Jatra and other festivals were cultural identify of Kisipid, as mentioned by many town dwellers. Others highlighted the community bond and self-help attitude of neighbours. Again, others appreciated the location of the settlement – free from noise and air pollution with mountainous background. They also mentioned the lack of job and economic incentives, reduction in religious activities and people's little interest in cultural heritage as the 'most dislike things' in their communities.

Existing Legal and Institutional Framework

These emerging physical and socio-cultural problems can not be addressed through the existing legal and institutional framework due to many reasons. First, no legal tool is available at present to regulate the

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new construction as well as to check the vertical division and haphazard renovation of old houses. Due to village status of Kisipidi, one does not need to present detail blue prints for construction of any building, just simple permission from Village Development Committee (VDC) is enough. Second, cultural heritage of this settlement is not on the priority list of Department of Archaeology. Potential of cultural resources is yet to be acknowledged by the local government, which has poor technical, financial and managerial capabilities. Third, many 'guthis' and religious activities have become ineffective and in some cases even disappeared due to government's took over of properties of such ubiquitous religious trusts in the 1960s. No social institution to replace 'guthi' has been established so far to continue cultural practice and maintenance of public properties. Many families associated with religious works are either reduced in number or migrated into other areas due to lack of interest and limited economic benefits thereby further hampering the continuation of such works. Mismanagement of 'guthi' land and corruption of 'guthi' members is another reason for reduction of socio-cultural activities. Fourth and last, level of community's awareness and public education towards the conservation of cultural resources and their economic potentials at present is very low.

Conclusions and Recommendations

The cultural heritage of Kisipidi includes the unique built form and socioeconomic activities and the cultural practice that links community to space. Failure to continue such linkages at present has resulted in formation of numerous problems - destruction of physical setting, negligence of cultural spaces, gradual erosion on socio-religious activities and increasing environmental pollutions. Though these problems are in the early stage, they can not be addressed through the existing legal and institutional framework due to its inadequacy and ineffectiveness. This combined with low level of community awareness has further hampered the exploitation of heritage for socioeconomic modernisation of the town. In such situation, a combination of 'top down' approach for formulating conservation oriented development plan and program and 'bottom up' strategy to continue socio-religious activities at community level is

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essential. Moreover, the following specific urban design techniques are recommended:

- (a) Revive cultural practices, rituals and religious functions through provision of multiple incentives, development of social network and building of partnership among the concerned stakeholders. Recognise the economic value of heritage and emphasise local activities and culture considering tourism as a supporting factor;
- (b) Develop architectural design guidelines for renovation and reconstruction of houses in the village and then apply them through flexible means such as building consensus among the local leaders, VDC and local government including community, providing incentives for guidelines followers and punishing defaulters, and so on; and
- (c) Ensure public education and community awareness through various means: research and development, event management, public hearing and information dissemination.

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