

Panam Nagar: Conservation and Management for Posterity

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Abstract

Ancient edifices are the material evidence of our past. In addition to architectural, aesthetic, historic, and iconic value, these have great emotional value as well. They are the symbols of our cultural identity and part of the heritage. Preservation of architectural heritage is immensely important to preserve cultural heritage for a society that values its past and cares for the posterity. Panam Nagar is an old settlement, part of Sonargaon area, in the central region of Bangladesh. The quality of spaces and the assemblage of large number of historic buildings there in Panam Nagar make it a perfect candidate for architectural and area conservation. The paper attempts to find a strategy to reinvigorate the settlement. The strategy or policy may be adopted for adaptive reuse of the individual buildings as well as the area. Initially the project started with the lobbying the concerned authorities to adopt fair and appropriate practice towards conservation, than coordinating different efforts towards achieving the goal. Currently efforts are to pool together the resources for sustainable cultural heritage management in Bangladesh for long term consequences.

Introduction

Background

Panam Nagar is an old settlement, part of Sonargaon area, in the central region of Bangladesh. Sonargaon was an important trade centre from early thirteenth century, which was made the capital of independent Sultanate of Bengal from 1338. In 1538 the Mughals took over the reign of Bengal and in 1608 the capital was shifted to nearby trading centre of Dhaka.

In early 19th century during the colonial rule when Kolkata was made capital, a group of wealthy merchants from Kolkata returned to their ancestral land in Sonargaon, and started to build a small township at Panam area, over an older ruined settlement. The Panam settlement may be broadly grouped into two distinct patterns with respect to location and layout. In the pattern one the building occupied the central position in a large compound following the model of the colonial Bungalow

compound complex. The other pattern may be referred as 'Street front houses' mostly concentrated along Panam Street. Panam Street, 5 meter in width and about 600 meter long along which most of the old buildings are concentrated, and surrounded by canals/moat (*khals*) has been taken up for this study.

The significance of preserving architectural heritage is now universally recognised. Bangladesh, while heir to a rich architectural heritage contains reminiscence of the past great civilization of the region, is yet to define its stand and policy on the issues of architectural conservation. Though resource constraint is a critical issue in conservation activities as in all development programs, for Bangladesh it is more than a question of additional resources. This paper attempts to develop an architectural conservation strategy for Panam Nagar.

Conceptual Framework

Ancient edifices are the material evidence of our past. In addition to architectural, aesthetic, historic, and iconic value, these have great emotional value as the symbol of our cultural identity and hence are a part of the heritage. Preservation of architectural work is immensely important to preserve cultural heritage for a society that values its past and cares for the posterity. The Constitution of Bangladesh (Article 24) and Antiquities Ordinance of 1976 (amended) provides legal support to conserve Panam Nagar for posterity. It is a listed site in the national register. Besides, recently gazetted Building Construction Rule'2007 also has provisions to conserve and manage historic buildings.

The quality of spaces and the assemblage of large number of historic buildings in Panam Nagar area makes it a perfect candidate for architectural and area conservation. Several layers of socio-economic phenomenon have overlapped in the area; the area has passed through at least three politico-religious phases. Only the signs of British colonial period clearly prevail now though a few sparsely located edifices from Hindu and Muslim periods may also be seen scattered all over the area. Panam Nagar is part of the urban settlement of greater Sonargaon, which existed with its own glory over several centuries. The site of Panam Nagar being historic and under governmental control provides a unique opportunity towards its conservation. If properly conserved and promoted, it has every sign of becoming a world heritage site.

Analysis

Street Front Setting of Houses

The area is densely built with single to three storied attached and detached houses of varying types and sizes. Fifty houses in dilapidated

and abandoned condition in the settlement have been identified within the moat (*Khal*). At present 29 houses are surviving on the north side of the road and 21 houses on the south. There are eight single story houses while majority of the houses are two storied. Large houses are partially three storied.

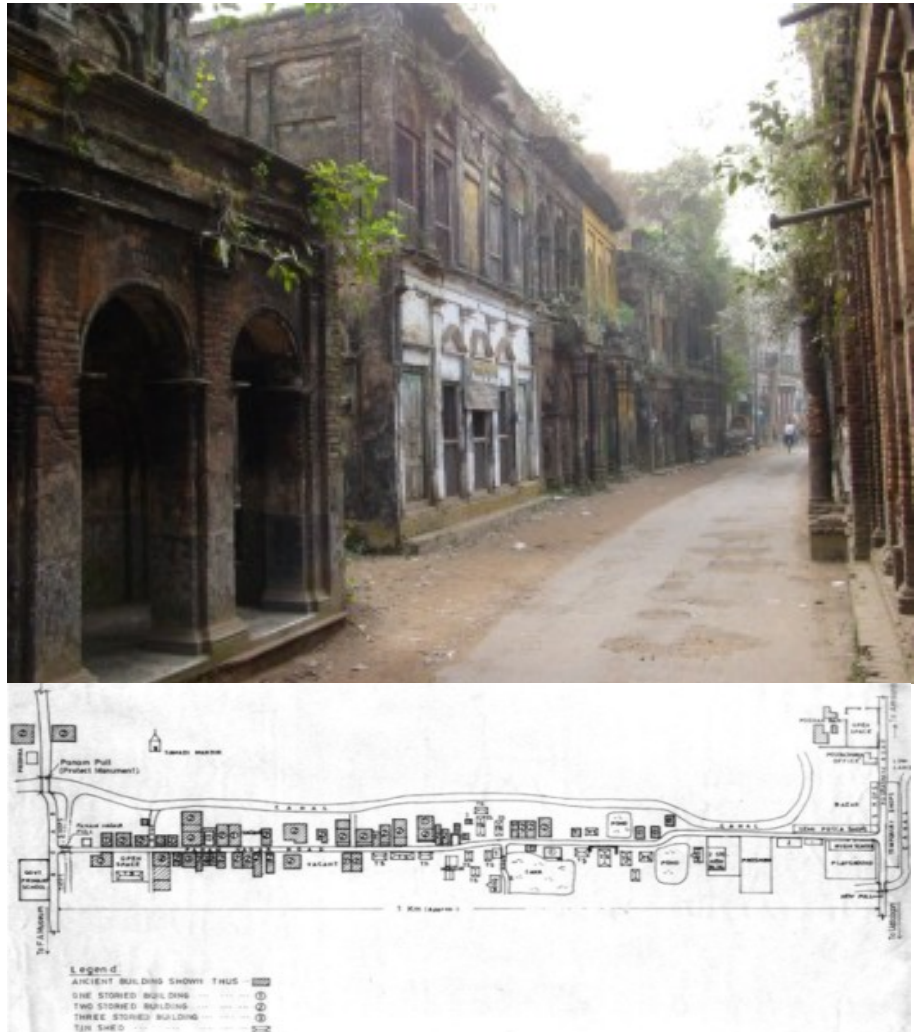


Fig.01: (a) View through the Panam street (b) Layout of the Panam Street within the Khal (moat)

In its present state of disuse and dilapidation, one can still feel the vibrant life of Panam in its hay days. A subtle competition to glorify the houses as an expression of self image among the owners is apparent. In other words each owner was presenting a facade to Panam Street in order to enrich the visual symphony of the ensemble, where each building keeping its own identity blended with the harmonious whole. The buildings followed a pattern language by which a unity had been achieved, like the use of two to three storey height, axuality, symmetry, arched openings etc. On the other hand variety had been achieved through the introduction of verandas, balconies, loggias, porches etc., and their inter-spaced location along the continuous street façade (Mowla 2000:45-62). The crowning of

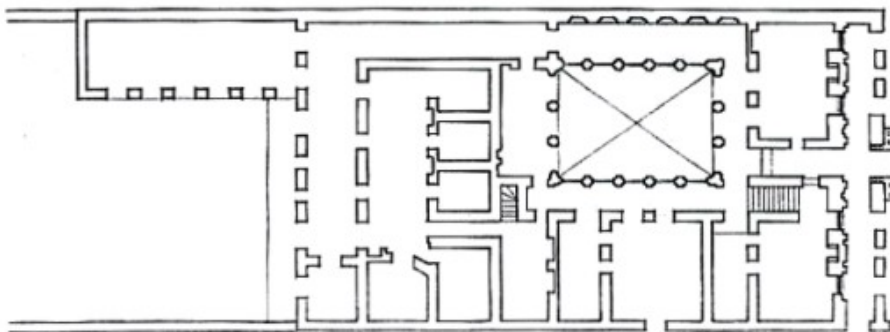
the buildings with decorative parapet and projected cornice fascinatingly interlocked the structures with the sky in the backdrop.

Formal Order of Buildings

The buildings are mostly rectangular in shape. The depth is greater than frontage in most houses. Average facade width varies between 6 to 9 meters. Facade of all buildings are axially balanced with three, five, seven and nine openings. However, the axially is not followed in the internal organization of spaces. Openings are made with different kinds of arches with pilasters in between. All the pilasters have defined base, shaft and capital. The floor levels are expressed externally with projected cornice. Parapets followed a uniform design and heights with vertical slit openings, rounded at the top and bottom. Raised plinth and veranda created the transition space between the inner house and the street.

Building Typology: Previous studies have identified (Hussain 1997:103-133) several types of dwelling houses of which 4th type is identified during this study (Shaikh 2004:127-136). The types are as follows:

1. Central Hall type: The central hall is the nerve centre of this typology of houses. The halls were highly romanticized with extensive decorations. These are the most expensive part of the house expressing the wealth and power of-the owner-occupier. The primary examples of central hall type are building no1, 2, 5, 16 and 26. In the building no.2 and 5 the halls are located in the first floor.



**Fig. 02: (a) Plan of Central hall type Building no. 16
(b) View of a Central hall**

2. Central Courtyard type: This is derived from traditional rural house form cantering around a courtyard. The courtyards are essentially enclosed, paved and open to sky. The enclosing walls of the courtyard are extensively delineated with arched openings and pilasters having ornamentation in base, shaft, capital, cornice and parapet. It appears that almost similar emphasis was given to the design of street facade and courtyard facades.

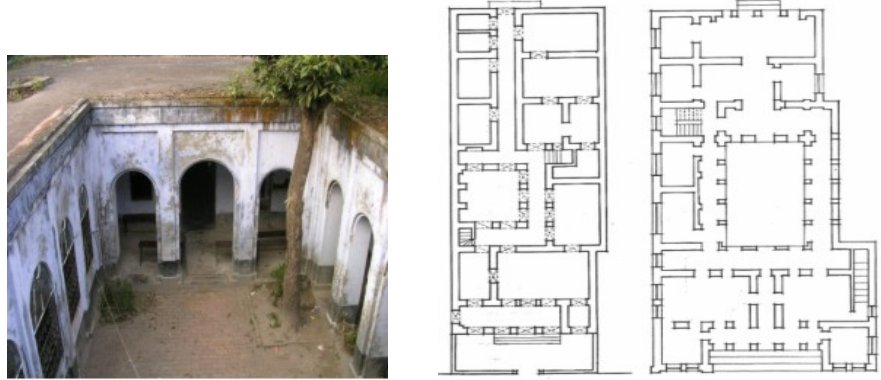


Fig.03: (a) View of Central courtyard (b) Plan of central courtyard type building: Building no. 36 and Building no. 40

3. Consolidated type: Majority of houses in Panam belong to this typology without having any inner court or hall. The consolidated types are designed with either an entrance portal or a veranda or a high plinth as transition space from street to inner house. No uniformity is found in the organisation of inner cells and rooms. Formal balance has been maintained in all the front facades unrelated to inner organisation of the houses. Single storied buildings in Panam mostly belong to this typology.

4. Compartment type: These are the single compartment houses without articulation of interior spaces but formal balance have been maintained in the outer facade to relate the buildings with the setting. In plan these buildings have single compartments. Building no. 35, 39, 41, 42, and front portion of 44 belong to this type.

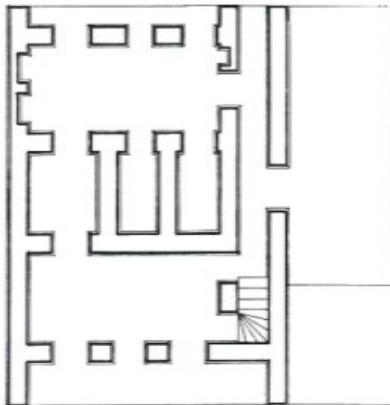


Fig.04: (a) Front View of Consolidated type (b) Plan of consolidated house no. 25



Fig. 05: Exterior View of Compartment type buildings number 41, 42 and 44 respectively.

Material and Construction

Construction Material and System: Bricks of Panam, the prime construction material have been modelled in different shape like rounded, angular, arched, pointed semi-circular, curvilinear etc. according to the need of surface articulation. Bricks are either plastered or left exposed for facade delineation. Angular brick masonry has been used in the area between the spring point and the crown of the arch, presumably for structural reasons. The thicknesses of brick masonry walls vary between 50 to 70 cm. Lime mortars have been used primarily for bonding. Roof stands on joist and made of wood in most cases. I-beam was also used occasionally. Brick vaulted roof usually covered the small rooms. Plaster decoration have been extensively applied in facade design and interior decoration. False wooden doors and windows shaped with plaster were also applied as a common decorative element. Stone quoins have also been copied in brick and plaster. Cast iron brackets, ventilators, window grill, balusters had been extensively used. Mosaic decoration with broken china locally known as '*chinitikri*' work was very popular in interior decoration and modest exterior application is also found in some examples.



Fig. 06: Cast iron I-section beam-joist roofing system, brick as a prime construction material and use of '*chinitikri*' as decorative material in the buildings of Panam Street.

Ornamentation and Style: The architectural ornamentation of the colonial period however presents a different character. The British introduced new elements from the western architecture and amalgamated those elements with the traditional provincial style of the Mughals. Thereby, a new hybrid style emerged known as the Indo-British or the Colonial style (Mowla and Reza 2000:31-58). Though the style was developed by the British-Raj, the follow up was made by the local Zamindars and the Kolkata based merchants, known as *baniyas*. The architecture of Panam, a residential quarter of Sonargaon, represents this Indo-British style with improvised architectural ornamental traits.



Fig. 07: Roof top structures (pavilion) in some of the buildings (nos. 9, 25 etc respectively)

Though the ornamentation of colonial buildings in Panam Nagar is not well preserved, yet it carries the legacy of a romanticized architecture of that era. The ornamentations of the colonial building are expressed through decorations on plinth and floor projection, door and window openings, pillars and pilasters, space between the arch and the roof, cornice and parapet, railing, bracket, building edge and ceilings etc. In the plinth level the decoration of Panam buildings consists mainly of moulding design in plaster, classical in character. The plinths of the Panam houses are fairly raised from the road and those are decorated with single, double and triple mouldings respectively depending on the height of the plinths. Most of the plinths have neat cement or mosaic finish. There are a few exceptions as well.

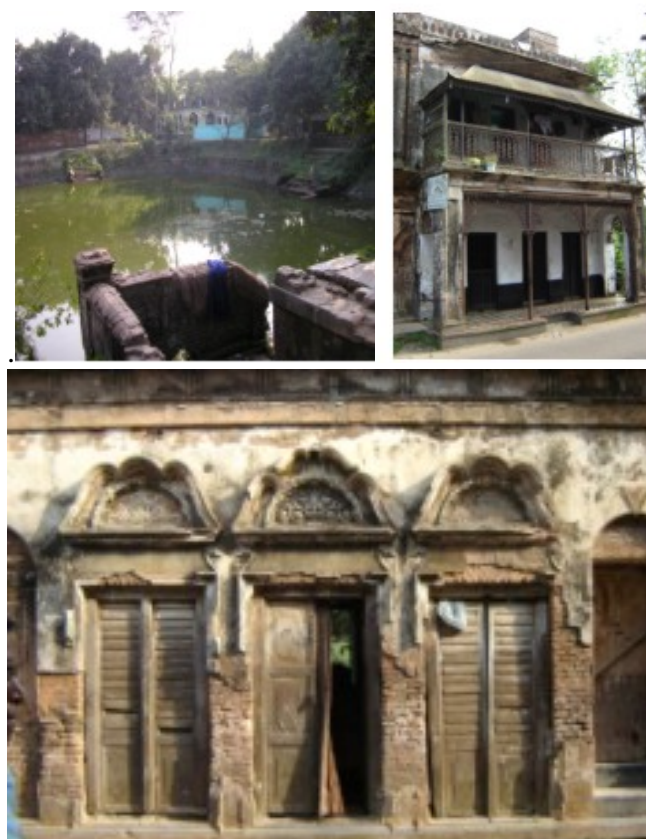


Fig. 08: Picture Showing Deck extended into the pond from the building, Cast Iron posts to support the balcony and decorative pediment in the buildings number 39, 31 and 41 respectively.

In Panam houses the design of the entrance formed the focus of the facade composition. Flanked on both sides of the entry, series of colonnaded arches create a harmonious composition. Entrances are usually designed with columns, pediments, arches and various other decorative elements. Preference for western architectural decoration is reflected in the ornamentation of entrance design, through the use of Corinthian type columns and semi-circular arches with pediments. Openings are made with different kinds of arches with pilasters in between. Key posts of the arches are given importance with floral and geometric elements. Doorways are regular and simple. The windows are mostly designed with semi-circular arches enclosed in a rectangular or square frame. Application of various types of arches has been identified in Panam houses. The semicircular arched opening supported on slender Corinthian type columns or pilasters are common features of veranda and open corridor design

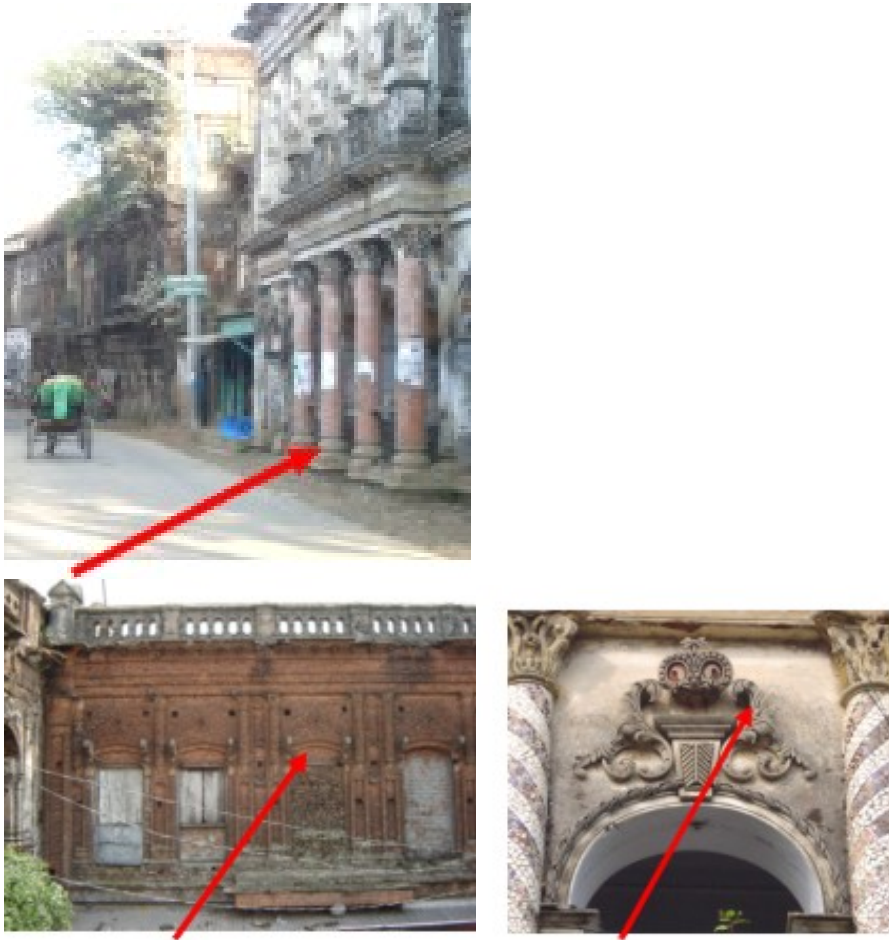


Fig. 09: Picture showing moulding at plinth level, closed window pattern and the use of regional floral motif over arch way in the buildings of Panam Street.

A marked tendency is observed towards illusionist representations such as closed window, blind arches and shuttered doors. This decorative treatment is European in origin and it has been blended in places with regional motifs. For example, regional floral pattern are used at the apex of the semi-circular arches to express a local identity. Application of human figures both in sculptured form and in relief work on the walls have been found in Panam. Brackets were found to have been designed with the image of Apsara in a house. Carved stucco figures of Virgin Mary and child have been repetitively depicted over the arches of the central hall of another house. Obvious European influence is visible in the relief figures of these buildings.

The pillars, columns and pilasters are all designed with well-defined base, shaft and capital. Varied types of columns are found in Panam:

1. Circular column placed on traditional *kalasa* (pitcher) base.
2. Traditional Fluted columns in the facade.
3. Wooden decorated column.
4. Slender iron column with *Kalasa* base.
5. Round exposed brick column.
6. Rectangular brick column with moulded base.



Fig. 10: Brick and iron columns placed on *kalasa* base and fluted column in the façade.

The spring-points of the arches from the capitals over the columns and piers are attractively embellished with diverse floral pattern and foliage of leaves and thus the foliage of leaves are the integral part of decorative motifs in the capital to Corinthian type columns. The example shows, the wide projecting porch on the ground floor has semi-circular arches resting on alternate brick pillars, while its upper portion is carried on Corinthian type columns decorated with China clay pieces. The key posts of the facade arches are embellished with crown motifs.

Corner treatments and Mouldings: The type of corner treatment with brick is typical in the colonial buildings. Bricks have been moulded into any shape required - angled, rounded, semi-circular, triangular etc. Moulded bricks have been used in the columns, capital projections, cornices etc. of different buildings. Carved mouldings are enriched with rosettes, buds and flowers, swinging creepers, flower with tendrils, wavy stems, profusion of vegetal elements and other floral decorations and figures. Representations of birds in decoration are found in Panam, on the apex of the central entrance. Other motifs are carved neatly on the moulded capitals and apex of the arches. Bara Sardar Bari has two ornamental facades on the west and south. The wide projecting bay on the south with a semi-circular arched entrance

is highly ornamented. The wide entrance is embellished with cut China clay tiles and stucco floral scrolls. The decoration chiefly consists of geometric patterns and floral designs in mosaic and inlay works.

The colonial architecture contains some Mughal ornamental features. Ruins of merlon parapet can be traced on the roof of some buildings. In the ornamentation of *Neel Kuthi* a combination of Mughal and local decorative elements has been applied. There is a row of prominent merlon decoration on the parapet in buildings of Panam. Hut-shaped *do-chala* structure on roof top also exists in some of the buildings of Panam which is an elegant feature taken from Mughal ornamentation. Other Mughal architectural decorative features incorporated here include straightened cornice, recessed niches of the door frame, slender engaged columns etc.

The component part of ornamentation of colonial buildings in Panam Nagar are characterised by a great variety of attractive external details of stucco decoration. Cast iron decoration is applied in various shapes and designs, such as brackets, balusters, facade treatment, window and railing grills. A notable feature of the brick and plaster decoration is the imitation of stone and wood construction details. Brick imitation of stone quoins or plaster moulding representing panelled wooden door and window are very common decorative applications. Corbelled brick or bracket often supported projected portions serving as balcony or the eaves of windows and doors. The edges of the end walls are defined with special decorative treatment.



Fig. 11: Round and rectangular brick columns on moulding base in the buildings of Panam Street.

The surrounding walls and openings of inner courts and hall rooms are profusely delineated. Decorative elements have been extensively

applied in the space between the arch and the ceiling. The frieze ornamentations consist of geometrical patterns and floral designs. Floral decoration includes rosettes, buds and flowers, flower with tendrils, wavy stems; swinging creepers, foliage and leaves etc., while geometric patterns include circles, pyramids, squares, chess-boards, dentils, twisted ropes, zigzag, diamond, chevron etc. It is interesting to note that as a general rule the intricacy of decoration is sequentially intensified from the bottom towards the top. In other words the ornamentation of the upper portion of building is progressively given more importance in order to embellish the facade.

The wall surfaces of the facade of colonial buildings around the court are ornamented with diverse floral patterns in plaster. The interiors have several rooms, some times designed around a hall with double height space. Coloured glass and glazed tiles were applied for decoration in many of the houses in Panam. A common decorative feature found in some buildings is the *chinitikri* work for surface ornamentation. The examples of *chinitikri* works are mostly found in buildings of later phase and in some renovation works.

The ornamentation of the colonial buildings of Panam Nagar is unique in the sense that it was a hybrid style evolved through juxtaposition of different types of decorative form and motifs from various sources. Introduction of colonial style has affected the age-old continuity of ornamentation in this region. The terracotta of the previous centuries is replaced by plaster decorated surface, niche and foliates devices. Roof supports were created with a variety of stuccoes surfaces and niches. The aggressive and intermixed nature of colonial ornamentation is in complete contrast with the earlier traditional architectural ornamentation.

Proposal

Conservation and Management of Panam Nagar

Master Plan: It is understood that any conservation plan must start with a road map for development; the master plan should have short, medium and long-term targets. Detail documentation of all the historic artefacts and spaces (including topographic conditions, drainage and vegetation) in their existing state is the first step towards any conservation strategy. Without detail documentation (scaled plan, elevation, sections, construction features and ornamentation besides close-up photographs, research to identify specific styles, etc) any historic artefact must not be touched. But time and again we witness different initiatives of conservation and management of historic buildings without adequate documentation.

In the case of Panam Nagar, whole conservation site should be first demarcated with the main (Panam) street as the focus or core intervention area. In order to protect the historic site from noise, vibration and pollution, the Panam Street may be made free from motorized traffic; a bypass road can be built to divert the through traffic, especially those by heavy motorized vehicles, away from the site. The bypass road may run parallel to the Panam Street but beyond *math*, *Krori bari* and *Poddar bari* (located beyond the northern moat), thereby creating a buffer as well as bringing the above historic artefacts and the Mughal Bridge within a single block of conserved heritage site with Panam Street as the focus.

Action Plan: As a short-term strategy to be implemented immediately, Pankhiraj Khal (moat) surrounding the core Panam area should be demarcated and excavated besides restoring the historic ponds and *Ghats* in that area. This would form the core intervention site. Damp proofing of all buildings in the area, both from the ground level and from top and sides (proper draining, injecting DPC below plinth level and providing coping or grouting on top of broken or unprotected walls, etc.) should be considered a priority and the task undertaken without delay. A buffer zone, beyond the surrounding *khal* (canal), with adequate vegetation may be created to protect the area from social and environmental intrusions and pollutions respectively. The road map for Panam Nagar conservation may be composed of the following action:

01. All ongoing construction work must be stopped immediately.
02. The water bodies should be re-excavated and a promenade developed.
03. Alignment of the proposed diversion road should be reconsidered.
04. A detail area survey should be undertaken.
05. A through documentation of all built forms within the site should be undertaken.
06. A Conservation Master Plan should be prepared for implementation.
07. Capacities and manpower within the Department of Archaeology or the organization entrusted with the job should be built up.
08. Whole process may be vetted by an apex monitoring committee composed of relevant experts (also represented by IAB Heritage Cell).

Current Status of the Work

Action 1, 2, 3 and 8 are under active consideration of the government. As this study tried to involve the government for logistic and financial support the government with the help of UNESCO, Dhaka have chalked out a programme (UNESCO 2008). The project is broken down into several packages for the ease of implementation. UNESCO project aims to address action 4 and 7. Outside the UNESCO project the present study is concentrating more on research and documentation, covering

action items 5 and 6 and has already conducted detail survey of Panam Street and documented the artefacts there. This would complement the UNESCO endeavours, which is at present concentrating on WP0, WP01 and WP5 of their own action plan in close cooperation with the author.

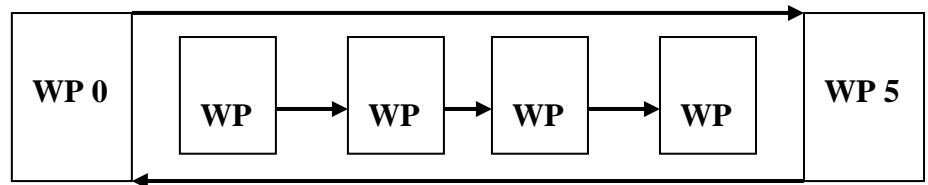


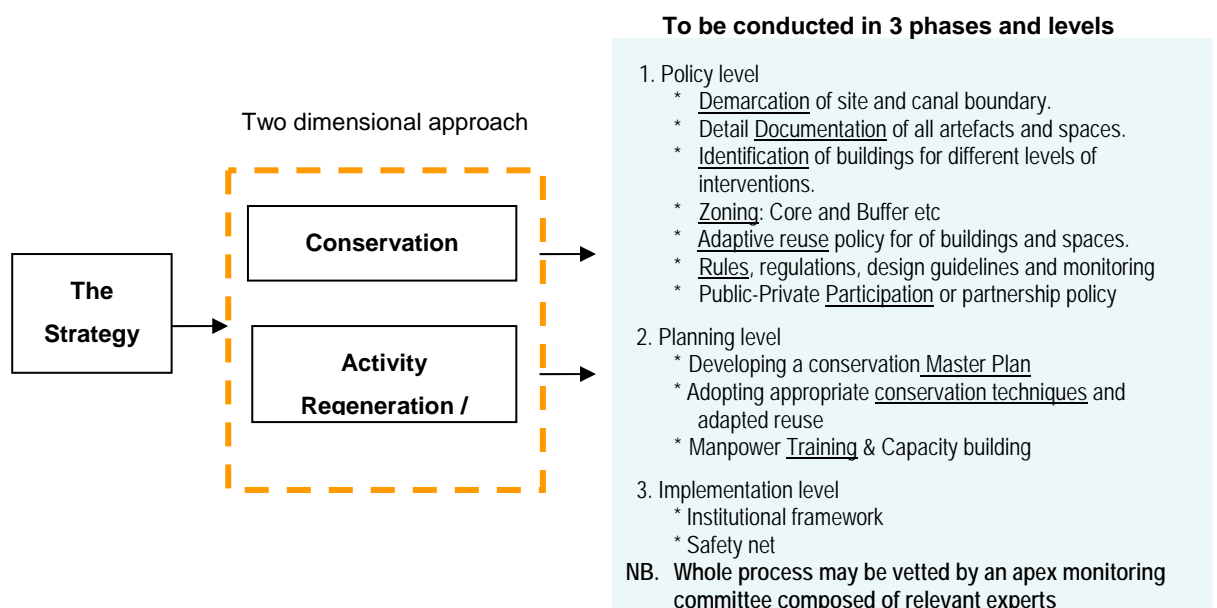
Fig.12: Graphic presentation of UNESCO project components.

- WP 0 Coordination and management (running through the entire project).
- WP 1 Establishment of an inventory of Panam, database and main GIS, a participatory approach.
- WP 2 Surveying, documenting, making the inventory and the GIS operational - a student training programme.
- WP 3 Rehabilitation, planning and conservation related to prioritized property in Panam Nagar -a training programme and participatory approach.
- WP 4 Panam Nagar eco-museum in collaboration with local folk museum.
- WP 5 Dissemination and reporting (running through the entire project)

(Author would participate in WP 0 and WP 5, and assist with field data/drawings in WP 1 & 2)

Discussion & Conclusions

The total conservation and management strategy as envisioned in this study may be summarized as follows:



On principle the need for conservation and management of Panamnagar has been accepted by various stake holders. Current study as well as the

UNESCO's programme are underway and are mutually complementary. The strategy or policy in both has opted for adaptive reuse of the individual buildings as well as the area as suggested by this study (Akhter 2004). Besides donors through UNESCO, the participating Partners in the comprehensive Panam Nagar project may be as follows under the Government of Bangladesh Umbrella about which the negotiation is in progress: Government (M/O Cultural Affairs, Archaeology Department), Professionals (architects, urban designers, engineers, archaeologists, historians, etc.), Environmentalists and Civic Groups, Media, Business entrepreneurs, etc. In nutshell, this is a collaborative approach for cultural heritage management in Panam and is the general guideline for conservation and management strategy of Panam Nagar for posterity.

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