



IT INDIAN HERITAGE PLATFORM: Enhancing cultural resilience in India by applying digital technologies to Indian tangible and intangible heritage

Project Aim

To enhance the cultural resilience of the Indian tangible and intangible cultural heritage, challenged by rapid urbanisation by exploiting the potential of digital technologies applied to the heritage.

Method

Developing a Tangible Heritage Dataset:

- Data Collection: According to a developed classification and in consultation with key stakeholders, heritage assets are selected and digital technologies are applied to gain 3D information.
- Data Analysis: A design team is formulated associated with the BIM studio to extract and compile all required information and develop the engineering drawings, orthographic sections, and 3D Building Information Modelling (BIM) models.

Developing a Intangible Heritage Dataset:

- A parallel task will be performed by a qualitative research specialized team of researchers. This includes gathering qualitative data (video, interviews, stories) on the case studies and public dissemination.

Pilot Study

Clock tower of Zapabazar, Surat

Surat city had two clock towers in the past among which one is the big structure specially built as clock tower situated in the Zapabazar area of old city and other is located on the top of Mughal sarai which is now the headquarter of Surat Municipal Corporation. The clock tower of Zapabazar is an excellent example of British timekeepers workmanship who built in 1871 for Khan Bahadur Burjorjee Hormusjee Fraser in the memory of his father Morvanjee Fraser, a board member of Parsi Panchayat Surat. Khan Bahadur got this 80 feet tall historical landmark build at the cost of 14,000/- INR. In earlier days, ticking sound of mechanical clock could be heard in entire city during night.



Photography survey

The best time to visit the Clock Tower is the evening time as the bazaar seems more lively. This monument is emblematic to the city of Surat. The Zampa Bazaar with its large number of textiles and unique embroidered crafts offers is a great place to shop and stroll. The Clock Tower exemplifies the architecture and skills of the artisans of the bygone era. There is no rigid timings and entry fees for the Clock Tower as such. It is one of the many landmarks with a story.

The photographic survey was conducted on 12 February 2019. Total 110 photographs taken as to cover whole structure from the ground. The photographs then processed and stitched together to form a 3D model in Autodesk ReCAP Photo. This 3D model then exported in Autodesk Revit Architecture to create BIM model.



3D reconstructed model

Research context

Geographical focus area: Surat, Gujarat

- Preservation of Indian heritage buildings and monuments is a major challenge;
- Without proper understanding of the heritage sites, the preservation of heritage values could be challenged;
- All relevant tangible and intangible information should be available on hand to preserve the heritage structures;
- Drawings of heritage buildings, specifications and sources of materials, methodology, etc. are not available when needed;
- Insufficient data leads to the delay of the preservation works of the heritage buildings;
- Lack of knowledge and awareness about the heritage, challenged by rapid urbanization and migration flows associated with movement of population;
- This phenomenon is undermining the local identity and could result in the extinction of the heritage and its socio- economic values.

Area of Impact: Policy & Management, Travel and Tourism Sector, Centre of Excellence, Appreciation, Research

Beneficiaries of project: Citizens, Civil society organisations, Academic community, Tourism business people, Surat Municipal Corporation, Archaeological Survey of India (ASI)

Fieldwork



Fig. 1: A secondary street in Rander



Fig. 2: A temple in Rander

The chosen case study for the fieldwork is Rander. Among the 34 election wards of Surat Municipal Corporation it is perhaps the oldest and has served as a port even before the port at Surat was developed. It had trading connections with many countries in Africa, Middle East and Burma.



Fig 3-4-5: the traditional urban fabric is replaced by denser concrete buildings

Besides the elaborate monumental buildings, the morphology and architecture of the closely packed residential units form a distinct historic precinct, which is rich in character. Unfortunately, traditional buildings are now being replaced with denser concrete buildings, which are considered more suitable to allow contemporary lifestyles.



Fig 6: intangible heritage in Rander

"Urbanization is a threat. Many people are leaving the properties because the housing is no longer suitable to the contemporary way of living."

(Interview with Surat City Planning officers, September 2018)

Project Team



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