



# **SMARTIN THE BUILT ENVIRONMENT**

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## **ABSTRACT**

*100 cities are now onto the SMART City mission list of India. The question trying to be answered is how architectural interventions help make a city smart? How the idea of smart might change from city to city, from context to context, how these smart interventions need to respond to the context- cultural, historical, social, economic and physical of the city being intervened.*

*A city on the SMART City list is Pondicherry. We visited the city with an idea to understand the context, the city and its people and come up with an intervention which is possibly SMART for the city of Pondicherry.*

## **I. WHAT IS SMART?**

There is universally accepted definition of a SMART City. Indian Government talks about comprehensive development which includes: Institutional, Physical, Social, Economical and Infrastructure for its idea of SMART.

## **II. FEATURES OF A SMART CITY**

Some typical features of comprehensive development in Smart Cities are described below.

Promoting mixed land use in area based developments—planning for ‘unplanned areas’ containing a range of compatible activities and land uses close to one another in order to make land use more efficient. The States will enable some flexibility in land use and building bye-laws to adapt to change;

Housing and inclusiveness - expand housing opportunities for all;

Creating walkable localities –reduce congestion, air pollution and resource depletion, boost local economy, promote interactions and ensure security. The road network is created or refurbished not only for vehicles and public transport, but also for pedestrians and cyclists, and necessary administrative services are offered within walking or cycling distance;

Preserving and developing open spaces - parks, playgrounds, and recreational spaces in order to enhance the quality of life of citizens, reduce the urban heat effects in Areas and generally promote eco-balance;

Promoting a variety of transport options - Transit Oriented Development (TOD), public transport and last mile para-transport connectivity;

Making governance citizen-friendly and cost effective - increasingly rely on online services to bring about accountability and transparency, especially using mobiles to reduce cost of services and providing services without having to go to municipal offices. Forming e-groups to listen to people and obtain feedback and use online monitoring of programs and activities with the aid of cyber tour of worksites;

Giving an identity to the city - based on its main economic activity, such as local cuisine, health, education, arts and craft, culture, sports goods, furniture, hosiery, textile, dairy, etc;



### III. GIVING AN IDENTITY TO THE CITY

The seventh feature of a SMART City talks about giving an identity to the city, every city chosen in the Smart City Mission has a history, culture, heritage which should become the basis of its development in becoming smart.

### IV. CULTURE AND CONTEXTUALITY- THE CASE OF PONDICHERRY

Pondicherry is the city on the Smart City List chosen as the field of study and a site for the design project. The story of the city's origin and its dynamic history rooted in trade, the obvious dichotomy within the populace- the French and the Tamil Indians, the transformation post independence and the current global metropolis nature it has acquired due to tourism made it an ideal ground for the study. The multi-layered character of the city along with its many narratives- historical, cultural, economic and even spiritual lent itself to formulate a fairly complex design project.

The study of Pondicherry was about acquiring a 'sense of place'. This was accomplished by studying streets, which were typical of the city, based on architectural character and the culture of inhabitants of the area. The city is based on a grid plan, from which the streets to be studied were identified. Alongside, an attempted to identify various building types and typologies on the respective streets. The eight streets studied are as follows:

### V. FRENCH QUARTER

1) **Goubert Avenue (Beach Road)**- a road along the sea, having the original Town Hall, the French Consulate, Maison Colombani (now restored and housing the Alliance Française), the Gandhi statue, the war memorial and the old jetty, a structure of great historical significance as Pondicherry was an important port in the past.

2) **Rue Dumas**- is a typical French town street having many heritage residential buildings now housing hotels, restaurants or shops catering to tourists. The Ecole Française d'Extrême-Orient (a French school specializing in research on human and social sciences), the Notre Dame des Anges Church and the house of well known ceramic artist, Ray Meeker are of special interest.

3) **Rue Suffren**- is a street that has hotels, restaurants, cafes and curio shops and is transforming to accommodate various current day public facilities like banks, PWD building. 4) **Rue de la Marine**- is a street running perpendicular to all the three streets listed and the sea. There is a peculiarity to this area as it houses the Ashram and related buildings. It is characteristically dull in appearance as compared to the southern part of the French town.

### VI. TAMIL QUARTER

1) **Rue Cazy**- is a typical Tamil town street in the Muslim quarter, mostly residential in nature along with two major mosques, including the Kutpa mosque. It sits diagonally in the otherwise rectilinear grid of the city fabric.

2) **Rue Montorsier**- is a residential street in the Christian quarter with large houses. Some of these houses have workshops, low budget hotels, restaurants and cafes.



**3) Rue Ananda Rangapillai-** is the main market street in the heritage town. It has the Ananda Rangapillai mansion and the grand bazaar and some heritage buildings that are being used as shops and godowns that are showing signs of decay. It is thriving with newer shops housing several branded stores.

**4) Rue Vysial-** is a primarily residential street (with a girls school) in the Hindu quarter, with some of the well-preserved Tamil type heritage houses. Some of these houses have been modified and are heritage hotels.

The site for the final design project is located in the heart of the heritage city of Pondicherry. The study finds its relevance in articulating the vision for the project, identifying design opportunity, formulation of the program and the conceptual response to the context of the city.

## **VII. BRIDGING SMART- PEOPLE'S PLACE IN PONDICHERRY**

Historically, the canal with its roads alongside, worked as a segregating device in the city- dividing the French town (then, White town) and the Tamil town (then, Black town). The canal seems to be the divider, so the sites were appropriately chosen to mitigate the divider. The project site is located on the canal. The project is meant to be a 'bridge', a connector between the two distinct settlements: programmatically, architecturally, and socially. The project is about changing the history of the city by changing the nature of the canal area, to be contextual to contemporary times. It is meant to be a catalyst that will connect the two sides of the city of Pondicherry. The project- Bridging 'Smart' is meant to be a place that will belong to all the people in Pondicherry- the local residents (French, Tamil and others), the French property holders, the tourists and the ashramites. The place is to enable greater interaction between various stakeholders through more approachable spaces for intellectual and leisure activity and venues for cultural assimilation. The idea is to create a place that is equitable in characteristics between the Tamil and the French Town. Integrating local food, local crafts, knowledge, health and spiritual awareness into the program became crucial. Hence, the program of the project includes flexible markets, food outlets and café, hall for cultural activities, wellness/ yoga pavilion, play/learning area, workshops for crafts, parking and services. Responding to context was key to formulate an appropriate approach and articulate design strategies.

## **VIII. CONCLUSION : THE FOLLOWING POINTS WERE ANSWERED**

1) There is the physical context of the site- in this case, the roads and crossing, canal & water, buildings on other side of roads, trees and green area (in N side site). This would mean that the experience on street is critical to understand to be able to alter it. Vehicular-pedestrian circulation, surrounding buildings, views, vegetation and the canal itself are to be understood to enable a response.

2) Then there is the historical context and at one level project is about trying to create another history. The canal and roads was a segregating device to separate the white and black town in 17th cent. Today, in the 21st cent. there is equality and social inclusivity that must be at the core of any city.

3) How does the project connect the two sides and becomes the bridge to alter the older narrative of separation to that of connection? That takes us to the third- that is time as context. How to design a contemporary language of the built environment? Should the building be like Tamil or Franco Pondy? If we want continuity, how can

we do it? Replicate? Capture the essence and apply? What kind of built expression? What kind of materials/ structure?

4) Then there is the entire city of Pondicherry that is context. People from all over world visit... quite global in that sense... a metropolitan culture? How would you design and build for such a city!?

5)The environmental context- climate (sun breeze temperature) foliage etc., how does the project respond to it? And then

6) Context of the context- the fact that Pondicherry is on the smart city list. What can be the vision of such a project in a smart city, a project that must catalyse change.



Fig 1. Design concept, bringing people together.



Fig 2. Ground floor plan, public interaction spaces



Fig 3. Upper level plan

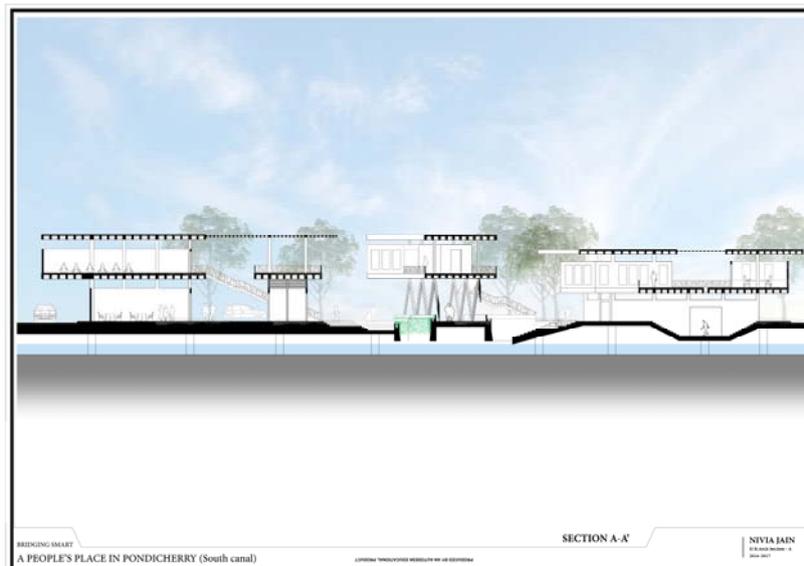


Fig 4. Longitudinal section