Capturing City Solutions for Knowledge Sharing

SPV Experiences during the ‘Maturation’ phase of the CITIIS program

Peer Learning Session 1 : Hubballi-Dharwad and Agartala
Produced by
National Institute of Urban Affairs (NIUA), New Delhi, through the Citiis Program Management Unit;
This documentation is an outcome of the first Peer-learning Session for SPVs in the Citiis program. The findings, interpretations, and conclusions expressed in this work have been derived from presentations made by the SPVs of Agartala and Hubballi-Dharwad in the session and the discussion that followed.

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<td>Rs. 51.00 crore</td>
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<tr>
<td>Project Cost</td>
<td>Rs. 99.00 crore</td>
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<tr>
<td>SPV</td>
<td>Agartala Smart City Limited (ASCL)</td>
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<td>Stakeholders</td>
<td>Citizens, tourists, women self-help groups</td>
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<tr>
<td>Categories</td>
<td>Riverfront Public Space, Environmental Improvement, Social Inclusion, Tourist Attraction, Landscape Design</td>
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Haora River Front Development – Phase II

Background

The Haora River Front Development projects aim at comprehensive development of inclusive public open spaces in the city, by enriching and revitalisation of approximately 1.7 kilometres stretch of the riverfront.

The project is a response to conserve the rapidly depleting green cover of the city, and thereby leading to lack of recreational public space for the people. Due to floods over the years, both the river bed and embankments have eroded. The strengthening of the embankment and other river-based interventions are critical to the project, as the Haora river is one of the few sources of drinking water for the city – contributing to over 60 per cent of the water supply in the city.

ASCL envisages developing a sustainable waterfront environment along the banks of the Haora to redefine the identity of Agartala as a tourist destination, enable a sustainable economy by generating livelihoods through the project, controlling soil erosion and flooding by strengthening of earthen embankment, and also arrest solid and liquid waste disposal by developing sewage and solid waste management system in the project.

Project Components

The SPV team in Agartala followed a holistic strategy during the design development phase, in alignment with the requirements of the ‘maturation phase’ of the CFIIIS program. This included extensive baseline data collection to gauge the feasibility of project components, meaningful stakeholder consultations to aid the decision-making process, as well as adopting good practices from around the world.

Some surveys conducted by the ASCL team: Topographical Survey, Bathymetry Survey, Geomorphological Study, Geotechnical Investigation, Hydraulic & Hydrological Study, Environmental Study, Existing Land use, Ownership & Infrastructure Study, Study of Existing Open spaces and Waterbodies, Site Accessibility Study, Activity Study, and Baseline Socio-economic surveys.

Key Highlights of the project discussed in the Session

The ASCL team has prepared a very robust Stakeholder Engagement Plan (SEP) as a part of their project’s ‘maturation phase.’ - which recognizes that managing the process of stakeholder engagement requires attention to the logistics and synergies of creating and operating a team of diverse people pursuing a common goal.

A detailed stakeholder mapping exercise was carried out by the team. Subsequently, various tools and methods were deployed to effectively engage stakeholders. This was done considering that each stakeholder group is unique, the engagement would depend on several factors—the driving forces of the SPV effort, the SPVs internal goals, the time frame needed for decision making, budget, and the political climate etc.
The Agartala SPVs methods of stakeholder engagement have proved effective for aiding the decision making process for the SPV. Their experiences, as explained in the session indicate that building trust in stakeholders, and taking responsibility for decisions or actions leads to more holistic, cost-effective, workable solutions, and builds a sense of ownership in the community, in addition to forging a stronger working relationship between the people and the urban local body.
Key Highlights of the project discussed in the Session – Horticulture Pilot Project

ASCL plans to pilot organic farming (horticulture and/or floriculture) for a site of 0.6 acres. The design proposal also envisions its development as a “Horticulture Education Park” for involving different user groups and for enhancing the understanding of the best practices for horticulture in the city. The proposal also identifies the potential of the riverfront and is intended to connect with the other future developments along the river bank to form a seamless connect creating a unified image of a larger green open space, and in additional offering environmental benefits to the city.

- **Linear stretch of land available with an area of 0.61 Acres adjacent to the Battala Bridge junction**
- **Bamboo shoring and edge protection through shrubs in order to prevent soil erosion from terraces**
- **Seasonal flooding by Haora River during monsoon months reaching the mid-terraces**
- **Arrangement of terraces to separate flood prone zones and safe zones in order to navigate irrigation and crop segregation**
- **Plot classification on terrace levels, furrows for irrigation and walkways for maintenance and exhibition**
- **Ramps on edges for wagons and small carts Admin area and plant nurseries for close monitoring of produce**
- **Horticulture on lower and upper terraces during the summer cropping cycle: Biannual sale and exhibition on upper terrace**
- **Seasonal feeding during monsoon allows the moisture and nutrient restoration annually on lower terraces**
- **Horticulture on lower and upper terraces during the winter cycle Biannual sale and exhibition on upper terrace**
Key Highlights of the project discussed in the Session – Horticulture Pilot Project

LEGEND
1. Parking
2. Main-Entry
3. Service-Entry
4. Entrance Plaza
5. Flower Bed/ Exhibition Area
6. Open/Flexible space for Admin area
7. Pergola for shading/ Avenue
8. Plant Nursery Zone
9. Horticulture Beds
10. Portable frames for Creeper support/ exhibition
11. Peripheral Plantation
12. Intermediate walkways
13. Proposed riverfront walkway
14. River bank stabilization
15. Public Toilet Block
16. Security Cabin

Nurseries near entrance to assist maintenance and to create a commercial interface opportunity for SHGS.

Composite Bamboo enclosures as traditional components of the region.

Floriculture as a component to mark the entry space; Can be also used as a space for annual exhibition of flowers.

Ber or Ziziphus mauritiana as fruit bearing plant for parallel economy, Boundary hedging and attract pollinators.

Bamboo perg Gl as to create shaded avenues, form visual portals, support flower and vegetable vines for display.

Utilization of traditional methods of soil retention in levels using locally available Bamboo shoring.

Connect City and river; Better response to city towards seasonal flooding, efficient soil moisture and annual nutrient deposition.

Utilization of traditional methods of soil retention in levels using locally available Bamboo shoring.

Parallel pathways for maintenance and circulation amidst the vegetable and flower beds at different terraces.

Ramp s with 1:10 slope to move and circulate on the periphery, for maintenance and carrying wagons for transportation.

Connect City and river; Better response to city towards seasonal flooding, efficient soil moisture and annual nutrient deposition.

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Parallel pathways for maintenance and circulation amidst the vegetable and flower beds at different terraces.

Ramps with 1:10 slope to move and circulate on the periphery, for maintenance and carrying wagons for transportation.
Adoption of Global Best Practices in Developing the Pilot Project

Food Field, Detroit, Michigan

Food Field, an urban farm built on a ‘revitalized site,’ offers a CSA (Community-Supported Agriculture) service, an alternative to the corporate food system, and local residents availing sustainable produce in weekly CSA boxes. In addition, there are local restaurants or volunteering on the farm itself.

FARM: shop and FARM: London, United Kingdom

Inside the once-neglected storefront, the space now includes small-scale aquaponic fish farming, high-tech indoor allotment, and a polytunnel. FARM: shop even has a rooftop chicken coop and café.

The goal of the project is not only to grow food for city dwellers, but also to prove to others in London that it is possible to grow food even without acres of space.

Other case examples referred by the ASCL team:

The Distributed Urban Farming Initiative, Bryan, Texas
Huerto Tlatelolco, Mexico City, Mexico

Urban farming presents an opportunity to utilize ‘underutilised land, rooftops etc for a purpose that not only adds value in terms of the social, food security and economic benefits, but also a way of improving urban environments.

The ASCL project emphasises on the importance of organizing the community, and commitment from individuals for escalating the potential benefits of urban farming. At the same time it requires municipal backing through supportive policies, appropriate zoning, and financial backing and incentives.

As the project will involve involvement of communities in the process of production, the pilot can become an “agent of change” for communities for strengthening social bonds, and engaging in activities promoting social and political change through people’s participation.

The project supports biodiversity generation by providing crucial habitat for pollinators such as bees, bats, butterflies and birds and offers opportunities for culturally significant, and native crops be re-introduced. In addition to supporting biodiversity, the initiative also aims at reducing storm water runoff, improving air quality and mitigating urban heat island effect.

Agartala’s methodology shows that planning and design process of a project should be accomplished in participatory and comprehensive manner. Conducting an integral evaluation and collecting technical information on the existing systems, through exhaustive baseline data collection are the first steps within this process.

Read more here: https://www.localsdifference.org/find-food-farms/find-food-farms.html/1745-1/

Read more: http://farmlondon.weebly.com
HDSCL Team

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### Hubballi-Dharwad

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Green Mobility Corridor

Background

With an aim to improve the quality of life for citizens in Hubballi by encouraging cycling and walkability, HDSCL aims to develop a nine kilometer long Non-motorized corridor along the Unkal Nala (storm water drain). In addition to this, the SPV has proposed the improvement of edge conditions of the drainage channel for better flow management.

The lack of centralised recreational facilities and the absence of dedicated cycling infrastructure led to the conceptualisation of the project, with the following overarching objectives:

- To develop a non-motorized corridor along existing drainage channel;
- To Develop the storm water drainage channel to its optimum capacity for better flow management; and
- To capture popular imagination by means of converting the existing un-clean, inaccessible Nala into a vibrant public utility and recreation space.

Project Components

Project Site

The Unkal Lake was constructed in 1893 in the northern part of Hubballi town as the main source of drinking water for the town. With an area of 260 acres, it was the main source of drinking water for Hubballi till other augmentation schemes were taken up to meet the needs of the burgeoning population of the twin cities of Hubballi-Dharwad.

The Unkal Nala is one of the main storm water drains passing through Hubballi city. It carries the runoff from Dharwad area, which ultimately leads to Unkal Lake. The overflow weir of the Unkal Lake is the starting point of this nala. From the overflow weir, this nala traverses a length of 7.5 km before out falling into Bidnal nala. Hence, Unkal lake, its catchment, the overflow arrangement would entail critical design considerations for the proposed project.
The project once implemented would provide the residents of Hubballi a 9.00 kilometer long public space with the following amenities.

- **9 kms long cycling path and walkway;**
- **24 number of rain/ Sun Shelters;**
- **06 Public Bike Sharing (PBS) Stations**

### 04 Integrated Amenity Centres
Public amenities like outdoor gym, children’s play area, amphitheater, yoga space, shaded plazas, pergolas, picnic tables, meditative space, art exhibition, dhobi ghat, community sitting areas, senior citizen courts.

### 07 Covered Foot-over bridges; and
Thematic gardens and Experience: Therapeutic Garden, Herbal garden, Butterfly Garden, Wetland garden, fragrant garden, biodiversity park, orchard, wild fruit garden, tall grass garden, woodland, miyawaki grove, buffer plantation.

## Key Highlights of the project discussed in the Session

HDSCL has prepared a very robust Stakeholder Engagement Plan (SEP) as a part of their project’s ‘maturation phase.’ The goal of the SEP is to help HDSCL in decision making by involving all stakeholders in a timely manner, so that the feedback/suggestions can influence activities the project through different phases such as:

1. **Engagement for Information Dissemination** - operationalized through Internal preparedness and alignment with stakeholders through Online, Paper, and In-person discussions.

2. **Engagement for Collaboration activities** - operationalized through Bespoke and collaborative workshops. The SPV has also set up a Grievance Redressal System to allow for feedback.

3. **Engagement for Design input** - operationalized through collaborative brainstorming sessions.

4. **Engagement for implementation** - Decision making through a structured, collaborative design processes, where concerns and ideas are shared, and a consensus is built to bring a sense of ownership in the project.

The HDSCL was confronted by a diverse set on un-anticipated challenges by COVID-19. The pandemic led to restrictions in carrying out on-field stakeholder consultations. However, this was navigated by the team through quickly changing and adapting their stakeholder engagement strategies in response to COVID-19.

The team moved to virtual engagements for informing the citizens about the project, while also inviting suggestions. The HDSCL team collaborated with a local radio channel to host the ‘Namaskara Hubballi-Dharwad,’ program for week, every morning between 7 a.m. to 11 a.m. The project team, including

Social survey conducted during Pandemic COVID-19 with all Precautionary measures (4000+ households surveyed)
the CEO, the Chief Engineer, the Domestic Expert, and project in-charge were invited as guests on the show, where they spoke about the impact that the Green Mobility Project would have for the city of Hubballi and for each citizen.

The main objective of the program was to engage the citizens in progressive dialogue. It is important to have an inclusive engagement process for establishing a clear and better understanding of the project among the citizens. Not only does it help to validate project activities, it also helps decision makers on analysis of alternatives offered to make better decisions.

The program saw an overwhelming response and active participation of the Hubballi citizenry. This goes to show that ensuring community participation and outreach at the grassroots level is successful in empowering communities to get involved in solving local issues. The feedback form citizens helped HDSCL in re-discussing certain aspects of the projects and duly inform their designs.

I am happy with the vision set by smart city, that the green mobility corridor project will have segregated solid waste management, treatment of the water and integrated mobility connectivity. Of course, this will project will benefit the people staying along the nala.

-Suresh, Citizen, Hubballi
A total of 67 participants, including project staff from CITIIS SPVs, PMU, AFID attended the event.

Watch the session recording here: https://primetime.bluejeans.com/a2m/events/playback/1ec11ba6-52de-4532-a0e1-8a0d09312244

ASCL Website: https://agartalasmartcity.tripura.gov.in
HDSCL Website: www.hubballidharwadsmartcity.com
Program Website: www.citiis.niua.org

For any further information on the project, please write to: citiis@niua.org and ssaxena@niua.org