

## Consultancy & Planning

More than 300 projects have been handled since its inception, covering diversified fields under housing and urban development sector.

### Objective

To promote, establish, assist, collaborate and provide consultancy services for designing and planning of projects relating to housing and urban development programme in India and abroad”

### Clientele

HUDCO Consultancy Services are suited for institutions that do not have the expertise or manpower, or want to supplement their own efforts. HUDCO Consultancy Services will also suit those housing or urban development agencies that wish to prepare project reports for implementation on their own or by availing financial assistance from International agencies, Govt. of India, State Governments or housing finance institutions including HUDCO.

### Professional Staff

HUDCO Consultancy services has multi-disciplinary professional staff including Architects, Town Planners, Housing Experts, Landscape Designers, Engineers, Transportation Planners, Ecologists, Construction Management Specialists etc. at various levels. It can also draw on the expertise available from other disciplines in HUDCO and external experts of repute.



The Architectural Consultancy team in HUDCO has close to five decades of experience in designing group housing projects, low income group housing, slum rehabilitation and redevelopment, rehabilitation of natural and man-made disasters victims, institutional, commercial, tourism, conservation and site management plans. It has a pan-India footprint and national and international recognition of its work



## Design Approach

HUDCO offers comprehensive architectural services for a wide array of development projects. The team comprises of architects and engineers with varied specialization and enables HUDCO to successfully deliver projects of diverse nature and of wide ranging scale.

The overarching objective and approach of the architectural consultancy is to use efficient design and building materials to ensure technical excellence, cost effectiveness, energy efficiency, resilience, climate responsiveness, social well-being and an improved quality of life.

The design process of HUDCO encourages active participation of the client and works in complete accordance with the expected time frame and budget.

The design team of HUDCO has successfully completed more than 300 projects of wide ranging scale and types across India. From designing high density low rise housing for economically weak, culturally relevant and feasible design for disaster affected victims with physical disability, responding to the challenges of designing a cultural complex in high seismic zone and site management plan for World Heritage Sites , tourism infrastructure and landscaping of botanical gardens, HUDCO has successfully demonstrated its versatility and spatial outreach.

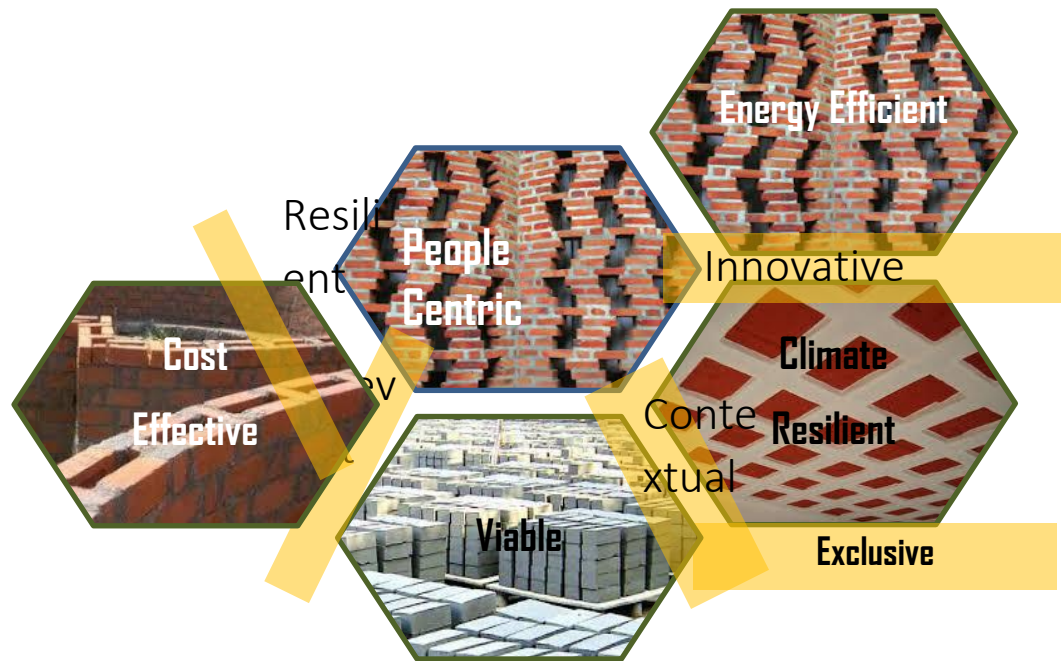
HUDCO consultancy has undertaken a number of projects in the areas of cost-effective housing, environmental improvement, development plans, post disaster rehabilitation, landscape and conservation. Some of the key areas of work include:

- Cost-effective housing designs.
- Demonstration housing projects
- Development Plans,
- State urban development strategy,

- Master Plans,
- CDPs for new / existing towns.
- Preparation of Slum free city plans.
- DPRs for various Towns under BSUP and IHSDP schemes of JNNURM
- Slum Redevelopment, Rehabilitation Up-gradation Projects.
- Transportation Studies,
- Urban Design Studies, etc.
- Landscape planning and design for various projects.
- Preparation of River-front Development Plans.
- Interior designing and implementation.
- Project Management for in house projects
- Design of Institutional & Commercial Buildings and Housing Projects.

**Some of the recent completed / ongoing projects of HUDCO are:**

- ✓ Corporate Office of Archaeological Survey of India, New Delhi
- ✓ HSMI Building, NOIDA
- ✓ Regional Office of HUDCO, Ahmedabad
- ✓ Pilgrim cum Cultural Complex, Namchi
- ✓ Shopping Complex. Fatehpur Sikri
- ✓ Shopping Complex. Imphal
- ✓ Tourist Facilities & Infrastructure at various places in Puducherry
- ✓ Staff Housing for HAL Employees, Bengaluru
- ✓ EWS Housing in NE India
- ✓ Vertical Housing Colony, Srinagar
- ✓ Renovation of Botanical Garden, Puducherry



## INSTITUTIONAL PROJECTS

### ARCHAEOLOGICAL SURVEY OF INDIA, TILAK MARG, NEW DELHI

Archaeological Survey of India, a government agency, responsible for archaeological research and the conservation and preservation of cultural monuments in the country, offered the prestigious assignment of designing their new corporate office at Tilak Marg, New Delhi in a plot measuring 1.04 ha falling within the Lutyens zone in Delhi. The major design challenges included incorporating functional efficiency in view of the typical tasks carried out by ASI that is contextual and in harmony with the predominant colonial architecture style of the region. It was also important that the design commensurate the stature of ASI as an organization and its mammoth task as the





custodian of built heritage in India. Accordingly, the external form of the building is designed to blend with and reflect the colonial architecture style of Lutyens Delhi. It is planned as curvilinear building to blend with the existing structure, Named as Dharoohar Bhawan, the building was inaugurated by Honorable Prime Minister of India Shri Narendra Modi.



### **HUMAN SETTLEMENT MANAGEMENT INSTITUTE, NOIDA**

Human Settlement Management Institute is the research & training wing of HUDCO that conducts training for in-house professionals, officers of ULBs and other government agencies. In collaboration with ministry of External Affairs, HSMI also conducts training for international participants especially from SAARC & African countries. A state of the art training institute has been designed and under execution in NOIDA that blends functional efficacy with aesthetics and energy efficiency.

Spread on a 4.0 Ha. site, the project comprises of main office building, guest house block, annex, and an auditorium planned and arranged around a beautifully landscaped area with open air theatre, green mounds and water body.

#### REGIONAL OFFICES OF HUDCO

As a part of its expansion strategy HUDCO is in the process of construction of its own offices across state capitals, which are in various stages of implementation with a few being completed and occupied and functional. The design for these buildings are done in-house.

The design focus of these buildings are primarily to reflect the institutional ethos of cost and energy concerns and live up to the image of HUDCO as the premier techno-financial institution in the country







### **REGIONAL OFFICES OF HUDCO**

As a part of its expansion strategy HUDCO is in the process of construction of its own offices across state capitals, which are in various stages of implementation with a few being completed and occupied and functional. The design for these buildings are done in-house.

The design focus of these buildings are primarily to reflect the institutional ethos of cost and energy concerns and live up to the image of HUDCO as the premier techno-financial institution in the country

### **SHOPPING COMPLEX AT OLD DISTRICT HOSPITAL, IMPHAL**

The Proposed Shopping Complex is one of the Asia's largest all Women Market located at old district hospital, BT road, Imphal, Manipur.

MAHUD, Govt. of Manipur engaged HUDCO for preparation of DPR for this Vibrant project. The Design aims to rehabilitate at least 548 Women Vendors in to a modern mall type complex with site admeasuring 3.29 acres. The design concept majorly focuses about the present and future needs of the users. Facilities like Centralized food courts, crèche, cooking/feeding rooms, bank, health centre etc., are provided efficiently. Large atriums covered with glass skylights are introduced to maximize ventilation. Common points are introduced as points of convergence. Terraces at higher floors are designed to accommodate flea markets/stalls



Site Images – Women market activities from temporary sheds

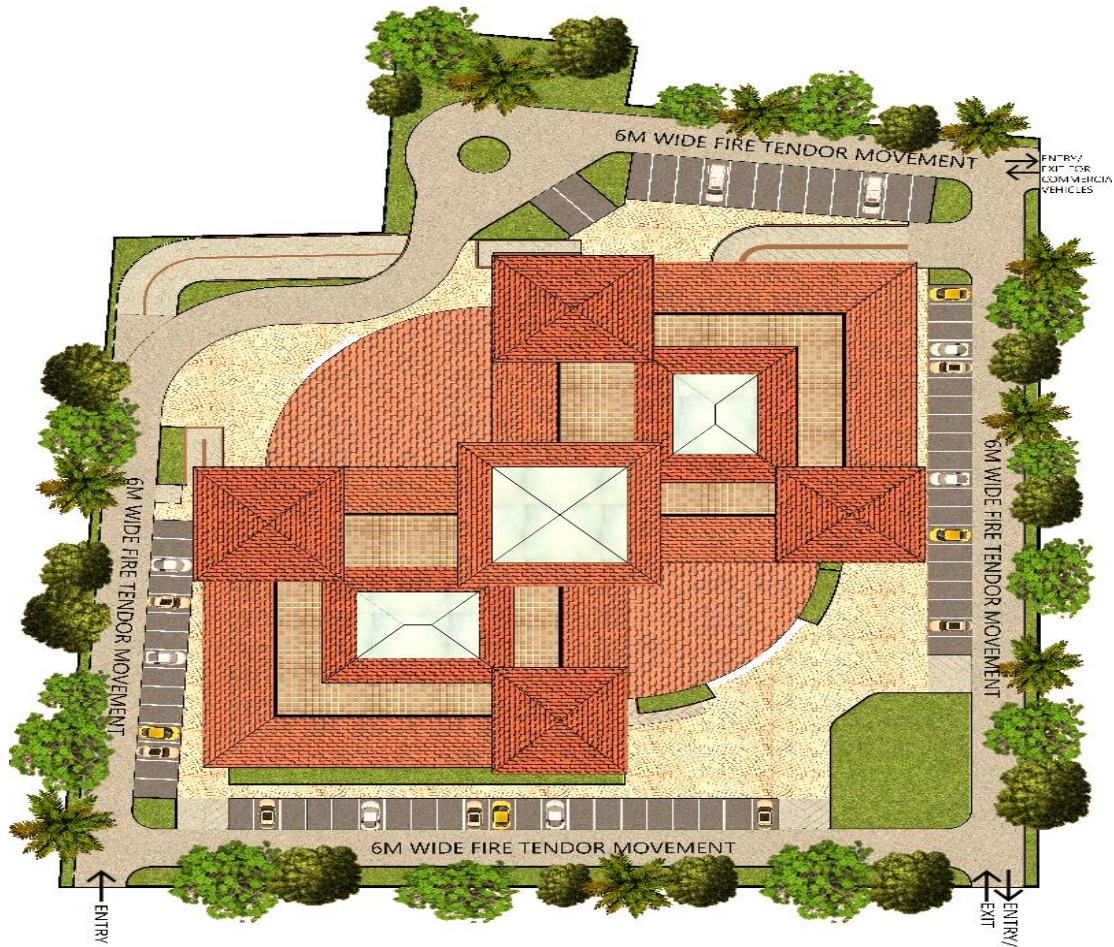


#### **SALIENT FEATURES**

- Sustainable Planning
- Sustainable building material and technology
- Rain Water harvesting
- Renewable Energy Technologies, Waste water Management



- STP : Sustainable Microbial Anaerobic Reactor Technology  
(OS SMART)



## HERITAGE, TOURISM & RECREATIONAL PROJECTS

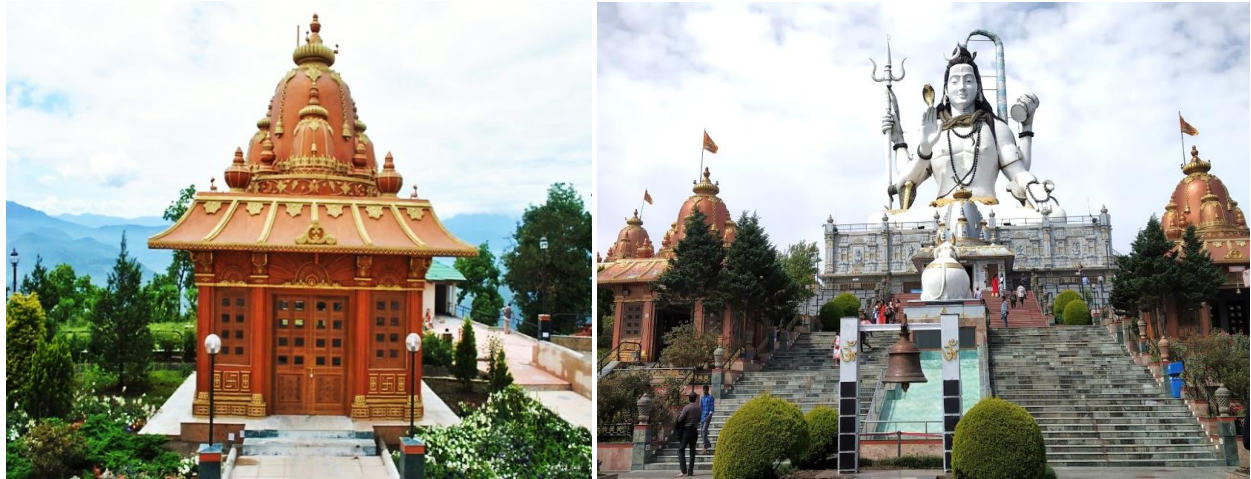
### Heritage, Tourism and Recreational Projects

HUDCO has planned and designed several heritage and tourism related projects and plans such as:

- Development of tourist facilities and traffic interchange nodes for various World Heritage Sites such as Agra, Ajanta Caves, Fatehpur Sikri, Bodhgaya.
- Development Plan with focus on Tourism & Conservation, Mahabalipuram. Master Plan for development of Thirunallar Temple Town.
- Detailed Project Reports for the following destinations and Tourism Circuits
  - Central Circuit Madhya Pradesh
  - Jammu – Rajouri – Poonch
  - Lakhnpur-Basoli-Banj-Sarthal

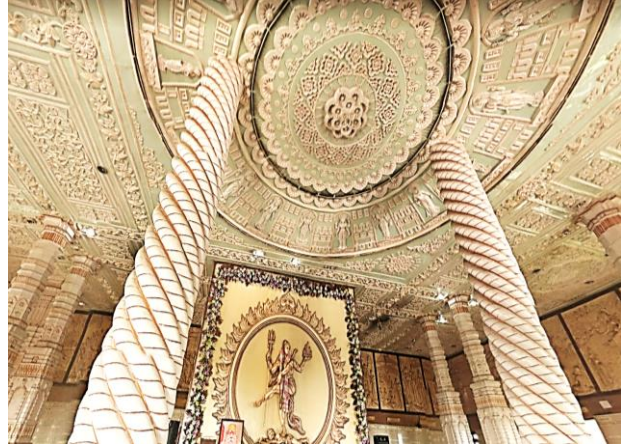
- Chattisgarh
- Assam-Kaziranga National Park
- Heritage Buildings in Mysore

## PILGRIM & CULTURAL CENTRE, SOLOPHOK, NAMCHI



The Pilgrim cum Cultural Centre in Namchi, is located on top of the hill at Solophok and spread over 7 acres of land. The focal point of this complex is the 108 ft. statue of Lord Shiva on a sitting posture in Solophok hill. The complex has replicas of twelve jyotirlingas and char dhams – all places of religious pilgrimage for Hindus. It also has other facilities like VIP guest house, yatri niwas, auditorium and other tourist amenities. The place has become a major tourist attraction for local as well as other tourists from all over India, thereby impacting the local economy. HUDCO has received Indian Building Congress Award for this project.





#### **QUEUE COMPLEX FOR LORD DARBARANESWARA TEMPLE, THIRUNALLUR**

The temple town Thirunallur is a small town where the centre of focus is the temple of Lord Darbaraneswara. The tourist footfalls in the town exceeds 10 lakhs during the Sanipeyarchi Festival. Surveys and studies inferred that there was an urgent need to develop a queue complex and a systematic way to hold pilgrims in groups at various places in the inner core, within walking distance from the temple. The queue complex was planned be a self-contained unit with all basic amenities, administrative building, shopping along the queue avenue, locker facilities, tourist information centre, accommodation booking office, ticket counter for darshan and recreational and cultural zones with pedestrian spaces.





Thirunallar Queue Complex was awarded “Outstanding Public Utility Building Project in Puducherry UT” by the Indian Concrete Institute (Puducherry Chapter) in 2016.



**RIVERSIDE SHOPPING & TRAFFIC INTERCHANGE NODE: BODHGAYA:** The Shopping Complex was designed and constructed to accommodate the shops that were proposed to be relocated from the vicinity of the World Heritage Site of Mahabodhi Temple complex to a site out of the heritage zone but with necessary safeguards so as the livelihood of the shop owners were protected. In keeping with the built form in the town of Bodhgaya and its religious legacy, the complex imbibed essential features of Buddhist architecture. The complex is designed in a cluster layout format and accommodates shops of varied types and scale. It also includes other amenities like food court, open pavilion and parking facilities.



#### **THE SHOPPING COMPLEX AND INTERPRETATION CENTRE, AT FATEHPUR SIKRI**

HUDCO has planned and designed several recreational and tourism related projects across many states in India and of different nature and category. HUDCO has worked on heritage led tourism including world heritage, religious tourism as well as tourist sites of natural beauty. HUDCO has also prepared DPRs for destination tourism and regional tourist circuits connecting various places of tourists

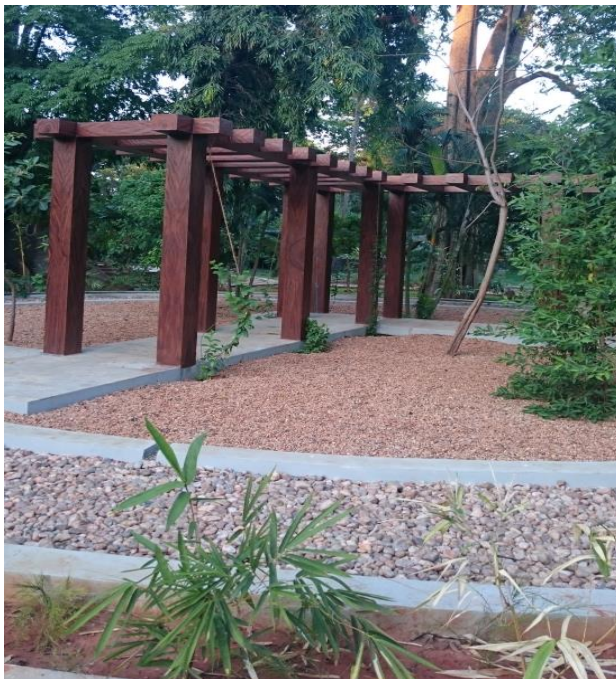


importance. The high points of tourism planning by HUDCO is its emphasis on sustainability, local economic development, conservation of natural & built heritage spread over a plot area of 8.13 ha. The design elements and materials are chosen with careful consideration to create a Mughal architectural style so that the complex with all its elements are in complete harmony of its surrounds.



#### RENOVATION AND BEAUTIFICATION OF THE BOTANICAL GARDEN OF PUDUCHERRY

HUDCO won competitive bid and was awarded the landscape work for renovation and beautification of the botanical garden of Puducherry that was established by the French in 1826 and was severely damaged by the cyclone Thane in 2012. The renovation and beautification work taken up by HUDCO has enhanced the recreational cum educational values of the garden by introducing various elements and landscape features within the existing layout in order to attract the visitors to the world of plants and subsequently to impart knowledge and raise a consciousness of plant conservation.





## DESIGN & DEVELOPMENT OF COTTAGE & ALLIED FACILITIES AT VIVEKANANDA KENDRA, KANYAKUMARI



## SPIRITUAL TOURISM CIRCUIT DEVELOPMENT, PUDUCHERRY

This is a unique project of developing and designing a Spiritual Tourism Circuit Development Plan conceptualized under the government programme - “Spiritual Circuit of Swadesh Darshan”. It has multiple sites and mainly covers the prioritized spiritual destinations at Puducherry and in Karaikal. The overarching objective of the design exercise is to provide spiritual experience to tourists and the scope includes adequate planning for infrastructure and amenities, aesthetics and landscape for an all round blissful experience.

The six sites for the project:

1. Kokilambal Thirukameswara Temple, Puducherry
2. Gangaivaraganatheeswarar Temple, Thirukanchi, Puducherry
3. Spiritual Park at Thirunallar
4. Sacred Tanks At Thirunallar
5. Sri Badra Kali Amman Temple, Ambagarathur
6. Jadapureswarar Temple, TR Pattinam, Karaikal

Each component has multiple design input elements ranging from entry gate to landscape, rejuvenation of sacred water bodies, tourist amenities and facilities, amphitheatres, meditation zone etc.





One of the major components of this tourism circuit development project is the restoration and beautification of the sacred ponds / waterbodies around this spiritual / religious centres.

#### HOUSING PROJECTS

##### AFFORDABLE HOUSING FOR LOW INCOME GROUPS

HUDCO's focus and typical design approach for EWS and LIG

HUDCO's contribution in the field of Incremental Housing, Cluster Planning, Low-rise high density development, application of appropriate and cost effective technologies has come in for much acclaim for sensitively catering to the needs of weaker sections and low income housing.



EWS Houses for SC/ST Beneficiaries, Puducherry & Karaikal,



**Community Housing Habitat - Gangimadhi, Gadag, Karnataka**



**Cuncolim, Goa-A Redevelopment Housing Habitat**







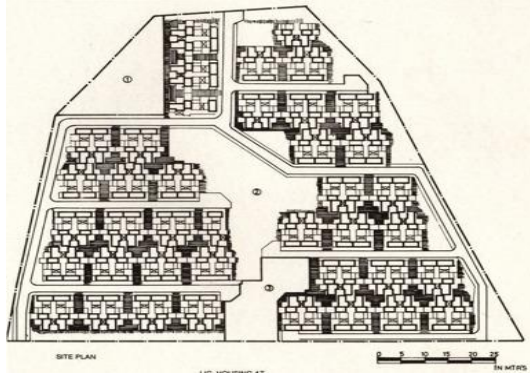
**Housing For Municipal Scavengers, Shivamoga, Karnataka**



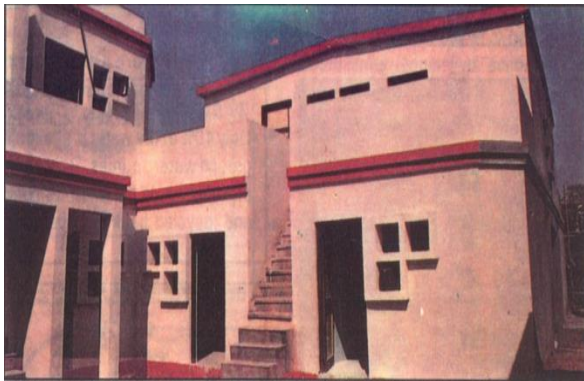
**Housing Project For The Gas Tragedy Victims, Bhopal**



**Chennai slum redevelopment**



**Atal Ashray Yojana at Girgaon, Gwalior, (M.P.)**



**LIG Demonstration Housing Project At Pimpri-Chinchwad, Maharashtra**

#### **AWARD WINNING HOUSING PROJECTS**

##### **HOUSING FOR BHOPAL GAS VICTIMS**

HUDCO Architectural consultancy designed the housing for rehabilitation of Bhopal gas victims. The approach adopted was low rise high density cluster planning in mark contrast to the multi-storeyed housing solution proposed by the state Govt. The high rise was considered highly unsuitable for victims given their physical conditions and reduced mobility. The proposed design included a G+1 development with incremental concept. A future room facility was kept for each unit at the same level. The houses were organized in a cluster condominium development. A cluster of 20 units was formed by combining four basic modules of five units in such a way that the central open area can be utilized by all beneficiaries for outdoor activities.

##### **LOW INCOME HOUSING PROJECT AT PIMRI CHINCHWAD, PUNE**

The project was a landmark for low income housing projects due to its incremental low rise high density development approach.

HUDCO received a project award for Excellence in Architecture from the Indian Institute of Architects for the project in 1990. The project was also nominated for Agha Khan International Award and as one of the five nominees for World Habitat Award, U.K. Subsequent to the project, the cluster planning approach gained acceptance for low income housing all over the country.



Low Income Housing Project at Pimpri-Chinchwad, Pune is an example of HUDCO's effort to be user sensitive to achieve user satisfaction. This cluster housing project for low income households designed by HUDCO was an conscious attempt to resurrect the concept of 'wadas' – a traditional typology of housing in Pune, that promoted social interaction and cohesion. The physical form promoted was also conducive to the lifestyle that struck a balance between privacy and social interaction. The project demonstrated feasibility of low-rise high-density development planning, in the context of the needs of the low income families.

The buildings designed were ground and one storeyed structures with 16 houses clustered at two levels around an open space. At each level every house had the provision to add a second room. The layout also provided for shopping corners at crossroads – linking facilities, pedestrian movement and open spaces.

An interesting innovation achieved through this project was the adoptability of the prefab system to the needs of low-income housing giving benefits of both speedy construction and quality. This project was specially noted for using pre fab system without compromising the aesthetics. The Project won the JIIA award in 1992.

**GROUP HOUSING FOR HAL EMPLOYEES, BENGALURU**





HUDCO was assigned the prestigious project of designing the staff rental housing for HAL, Bengaluru. The project is spread over three different plots. The highlights of the housing project is its green features focusing on appropriate building orientation and site sustainability. The project showcases suitability and applicability of high rise medium density and low rise low density depending on the varied needs of the end users. The project is registered with GRIHA/IGBC and designed with host of green sustainable practices to reduce environmental impact.

#### **VERTICAL HOUSING SHEHJAR APARTMENTS, SRINAGAR**

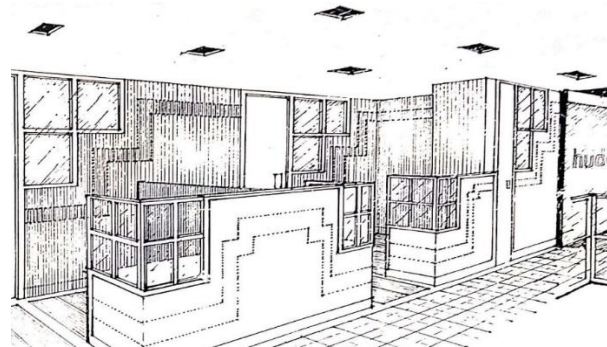
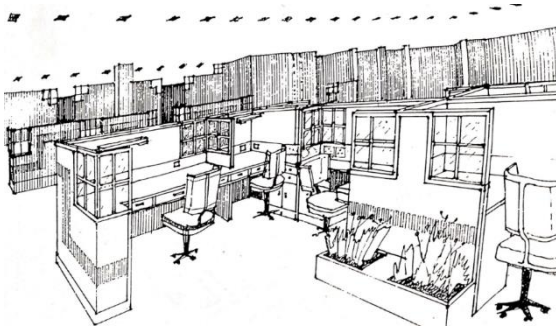




The project located in Bemina, Srinagar, Jammu and Kashmir. is designed as climatically responsive building based on the local style of architecture. The towers are arranged overlooking the landscaped central courtyard. Dwelling units design is conceived from the traditional and cultural aspects of the users. Also amenities like Community Centre, Shopping Centre and Place for Worship etc. are provided. Parking facilities are restricted to stilt and periphery road of the site for a free pedestrian movement in the central courtyard.

### **INTERIOR WORKS OF INDIA HABITAT CENTRE, NEW DELHI**

HUDCO's Consultancy team designed the interiors of our own office as also of others like Council of Architecture. The typical design elements included open office layout with corner cabins for senior officials. The partitions, furniture, doors were composed of similar vocabulary of 4 feet high partitions, worktops, cabinets, cadenzas in board with harmonious play of colours, finishes and textures with square shaped glazing patterns.



### **PROPOSED INTERIOR WORKS FOR CDRI OFFICE, NDMA, NEW DELHI**

The proposed Interior works for Coalition For Disaster Resilient Infrastructure (CDRI) office, is located at Bhikaji Cama Place, New Delhi.

Design incorporations:

- Flexible Layout and Activity-based Workplaces
- Brining Nature in Design, Usage of Green Listed Furniture
- Dynamic and Agile Spaces, Recreational Zone,
- Collaborative Meeting Rooms,
- Technology – based Smart Office



### - Play with Colours and Texture



## LANDSCAPE DESIGN PROJECTS

### DEVELOPMENT OF BOTANICAL GARDEN, YANAM

Yanam is a town in the union territory of Puducherry (Pondicherry). The site measuring a total of 53 acres along with the area for water storage areas which is the only source of drinking water for the town was acquired by the PWD Yanam. The proposed site for botanical garden was 8.8 acre. The garden was designed to improve the environment & Ecology of the area and also to act as buffer to protect the water bodies from expanding built-up area. The major achievement of the project is that it converted barren waste land to the green lung for the town with plazas, play areas, kiosks and other points of touristic attractions all supporting & addressing the environmental concerns.







### Major Achievements

Many HUDCO designed projects have received National and International recognition, which includes “Excellence in Architecture” award from Indian Institute of Architects, “Aga Khan International” award as well as “World Habitat” Award sponsored by Building & Social Housing Foundation, U.K. HUDCO also received Prime Minister's National Award for “Excellence in Urban Planning and Design” for Satellite Township Project at Jammu from Ministry of Urban Development. HUDCO. Consultancy has also received significant appreciation from Lok Sabha and Rajya Sabha for Disaster rehabilitation efforts in Orissa and Gujarat. The earthquake rehabilitation efforts at Latur and Osmanabad have received international commendation.



## AREAS OF CONSULTANCY

### Consultancy and Planning Vertical

#### URBAN AND REGIONAL PLANNING CONSULTANCY

HUDCO has worked extensively in Urban and Regional plan preparation, including master plans, City Development plans, slum redevelopment, relocation and rehabilitation plans of national importance, and planning policy related works. Some of HUDCO's Urban and regional planning consultancy projects include:

- ❑ Integrated Master Plan for Rajgir Regional Planning Area and Nalanda Mahavihara World Heritage Site, Bihar (Ongoing)
- ❑ Development Plan for Khargone and Jhabua, Madhya Pradesh
- ❑ Master Plans for Arrah, Bodhgaya, Biharsharif, Bhagalpur, Chapra, Darbhanga, Gaya , Muzaffarpur, Rajgir towns in Bihar
- ❑ Slum Free city Plan for Gangtok, Sikkim and Chas and Ranchi, Jharkhand
- ❑ City Development Plan (CDP) for Bodhgaya & Panaji
- ❑ State Urban Development Strategy for Jharkhand



HUDCO's approach to planning projects

#### The Planning Team

HUDCO's planning consultancy is proficient in delivering comprehensive urban and regional planning assignments at town, district as well as state level for Urban Local Bodies, State governments and Development Authorities. Strengthened by a strong multidisciplinary team, the hallmark of the planning projects of HUDCO is its participatory approach and inclusive and holistic solutions that benefits all stakeholders and is not limited to physical planning but extends to address environmental concerns,

employment generation and social well-being. The planning team of HUDCO comprising of regional, urban & transport planners with extensive experience in plan preparation. HUDCO also offers and evaluates alternative conceptual plans and development options vis- a-vis environmental impact, carrying capacity and the sustainability concerns to ensure pragmatic and implementable solutions.

## Highlights of some recent projects

### SLUM FREE CITY PLAN OF ACTION FOR GANGTOK, SIKKIM

The Slum Free City Plan of Action for Gangtok, Sikkim was prepared by HUDCO. The SFCPoA of Gangtok that had approximately 23% of its population in slums was a challenging task because of its fragile ecology, terrain and restrictive land laws. A GIS based plan was prepared based on robust tenability and vulnerability analysis. It outlined the curative strategy as well as preventive strategy for a slum free Gangtok. It also outlined investment plan, institutional framework and policy



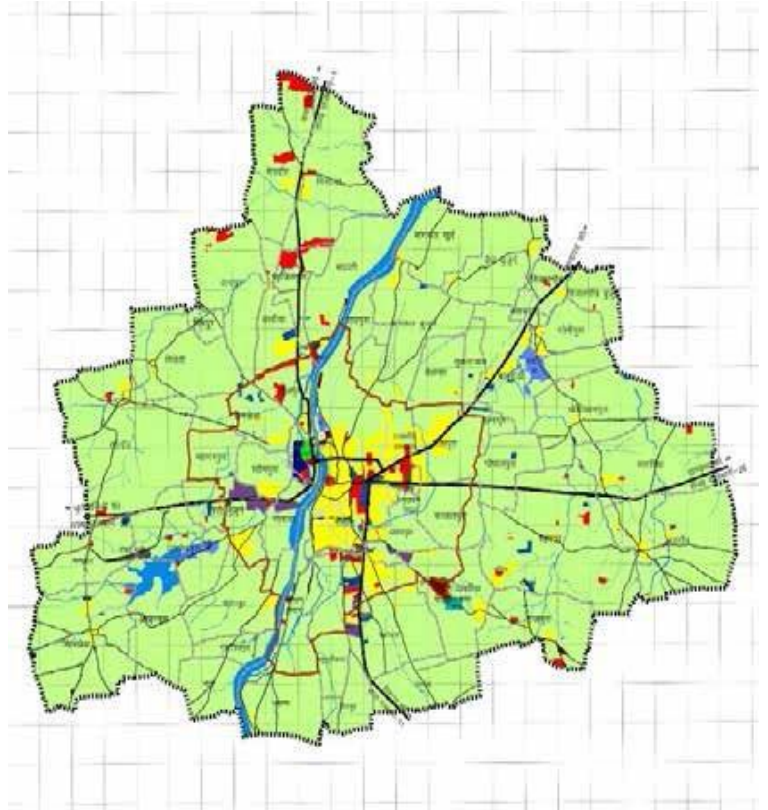
reforms required for implementation of the plan. The plan was approved by the Central Sanctioning Monitoring Committee, Ministry of Housing & Urban Poverty Alleviation, Government of India.



## DEVELOPMENT PLAN FOR KHARGONE, MADHYA PRADESH

HUDCO provided consultancy for preparation of Development Plan for Khargone, Madhya Pradesh. Khargone town is located in the south western Madhya Pradesh, in the Khargone District. The town has a population of approximately 1.1 lakh persons as per Census 2011. The town is the district headquarters, as well as an important trade and industries centre.

The preparation of the cadastral based GIS Development Plan (Vikas Yojana) involved integrated planning for the development and growth of the Khargone Planning Area, with a twenty-year perspective.



## Some Examples of earlier projects

### THE NEW JAMMU TOWNSHIP

A satellite township to the historical town of Jammu that faced tremendous population pressure was planned and designed by HUDCO. The site area of 900 Ha was close to the river Tawi. The township planned for around one lac population was guided by the principle of ecological preservation.

Evaluation studies and eco-inventory were undertaken to assimilate the eco-system as it existed to the proposed development so as to minimize the negative impact of development. The new town proposals included recycling of river water taken from Tawi, conservation of natural surface drains as potential ground water recharge zones and sewage disposal through low cost natural treatment before recycling and disposal in the river.



**Satellite Township at Sidhra -N-Majeen, Jammu**

**The project received “The Prime Minister’s National Award for Excellence in Urban Planning & Design.”**

## **TOURISM MASTER PLAN FOR TAMIL NADU**

HUDCO Consultancy was entrusted with the assignment of preparing the Tourism Master Plan for the state of Tamil Nadu. The scope of work included preparing an inventory and assessing the tourism products and the plan recommended strategy, policies, programmes & projects including funding & management mechanism for tourism promotion in the state.

The master plan provided;

- Comprehensive strategy for tourism development with road map for implementation
- Proposals for new circuit development for tourism
- Concept for destination development for selected clusters



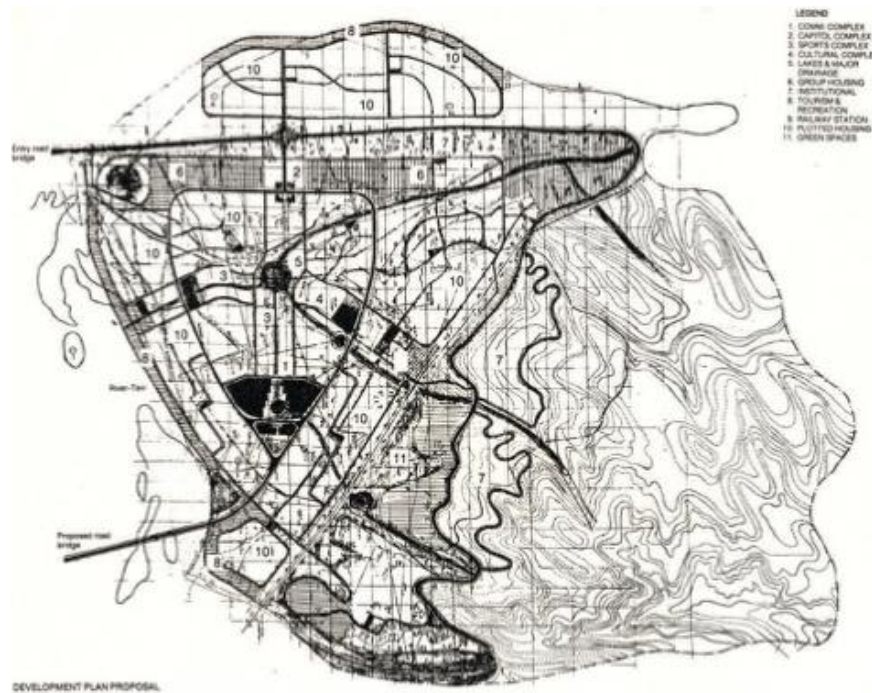
## **THE NEW JAMMU TOWNSHIP**

A satellite township to the historical town of Jammu that faced tremendous population pressure was planned and designed by HUDCO. The site area of 900 ha was close to the river Tawi. The township planned for around one lac population was guided by the principle of ecological preservation.

Evaluation studies and eco-inventory were undertaken to assimilate the eco-system as it existed to the proposed development so as to minimize the negative impact of development. The new town proposals included recycling of river water taken from Tawi, conservation of natural surface drains as potential ground water recharge zones and sewage disposal through low cost natural treatment before recycling and disposal in the river,

The project received “The Prime Minister’s National Award for Excellence in Urban Planning & Design.”





Satellite Township at Sidhra –N-Majeen, Jammu

### COMPREHENSIVE DEVELOPMENT PLAN FOR VRINDAVAN TOWNSHIP, LUCKNOW

The project involves preparing the landuse plan, and detailed layout planning including Infrastructure details for a site of 1200 Hectares at Lucknow, Uttar Pradesh. The township was planned for a population of five lac persons and focused on water conservation and green city principles.



Comprehensive Development Plan for Vrindavan Township, Lucknow

Consultancy & Planning Services

The Consultancy & Planning Services team has over four decades of experience in project design, and formulation for various consultancy clients. It has successfully completed a number of projects in diverse sectors such as:

- Housing & Slum Rehabilitation Projects
- Landscape Projects
- Disaster Rehabilitation efforts
- Cost Effective and Ecologically Appropriate Alternative Building Materials and Technologies
- Heritage and tourism Projects
- Preparation of DPR for BSUP & IHSDP under JNNURM
- Commercial and Institutional building Design



HUDCO has been providing invaluable technical support to the Ministry of Housing and Urban Affairs in implementing various flagship programmes of the Government of India. As the technical arm that has spatial outreach in Each and every state of India through its network of Regional Offices, HUDCO has assisted the Ministry in scrutiny of projects (both site and desk) for consideration of sanction of Central funds by the Central Sanctioning & Monitoring Committee (CSMC), Govt. of India. HUDCO has also provided support for monitoring of physical and financial progress of various Govt. of India schemes and also conducted quality checks of assets created with financial assistance of Govt. of India.

#### **KEY AREAS OF WORK**

- ☐ Scrutiny of DPRs, site inspection under Pradhan Mantri Awas Yojana (Urban)
- ☐ Inspection of Night Shelters constructed under the Shelter for Urban Homeless component of DAY NULM
- ☐ Prototype designs for Shelter for Urban Homeless for four climatic zones
- ☐ Inspection of Govt. funded social infrastructure and housing projects in NE States including Sikkim
- ☐ Assisted the Ministry for preparation of guidelines and forms under JNNURM.
- ☐ Appraised of DPR /project proposals under Basic Services to the Urban Poor and Integrated Housing & Slum Development Program under JNNURM.
- ☐ Assisted in preparation of 'Toolkit for preparation of BSUP/ IHSDP Detailed Project Reports'
- ☐ Design Manual for affordable housing
- ☐ Awareness Building Workshops
- ☐ Third party monitoring of Delhi Police projects





Environmental Engineering Consultancy Cell in HUDCO has a team of experienced multidisciplinary professionals viz. environmental engineers, civil engineers, architects and planners. It has developed and integrated project concepts in environmental engineering infrastructure mainly water supply, sanitation, and solid waste management sector with implementing agencies. The Cell has under taken Development/Implementation of urban infrastructure projects in various sectors including urban water and sanitation, solid waste management. Key competencies include preparation of feasibility reports & DPR of solid waste management, sewerage and drainage.

#### KEY AREAS OF WORK



The major areas of work include:

- ☐ Water Supply
- ☐ Sewerage & Drainage
- ☐ Solid Waste Management
- ☐ Impact Assessment Studies
- ☐ Govt. Scheme Appraisal & Evaluation
- ☐ Capacity Building
- ☐ Innovative & Low Cost Sanitation Solutions



**Sabarmati River Front Development, Ahmedabad**



**Face Lifting of Dashshwarmedha Ghat**



**Dharamveer Sambhaji Lake, Maharashtra**



**Sabarmati River Front Park, Ahmedabad**

**PROMINENT PROJECTS:** The environmental consultancy cell has an illustrious portfolio of projects of national importance and repute that has impacted the urban landscape in India.

- ☐ Feasibility reports for municipal solid waste management for 27 towns including 10 airfield towns of IAF
- ☐ Detailed Project Report (DPR) for solid waste management for Sensitive Zone of IAF Airfields in Pune Gwalior & Tejpur
- ☐ Detailed project report for sewerage scheme of Bhilwara City, Rajasthan.
- ☐ Consultancy for technology selection for treatment of disposal of municipal solid waste in NOIDA
- ☐ Preparation of DPR for Storm Water Drainage for Industrial Areas of Noida
- ☐ Appraisal of sewerage project for Gangotri, Rishikesh & Haridwar under Ganga River Basin Authority on behalf of Ministry of Environment & Forest.
- ☐ Third party evaluation of Central Sector Scheme of MoEF & CC in Environmental Protection

#### **MUNICIPAL SOLID WASTE MANAGEMENT**

HUDCO has prepared Detailed Project Reports (DPRs) for Solid Waste Management and Drainage for towns of Pune, Gwalior, Tejpur (Assam), Tura & Shillong (Meghalaya) and Feasibility Report for “Selection of suitable Technology for processing / disposal of Municipal Solid Waste in NOIDA City.

HUDCO has prepared Feasibility Report for Solid Waste Management in the towns of Ambala, Dwarka Sub-city of Delhi, Dundigal, Sirsa, Pune Gwalior, Adampur, Ghaziabad, Bareilly, Jodhpur and Tezpur



#### **SEWERAGE / DRAINAGE PROJECTS**

Ministry of Environment and Forest (MoEF) empaneled HUDCO for appraisal of Sewerage Projects under the National Ganga River Basin Authority (NGRBA), National River Conservation Plan (NRCP) and National Lakes Conservation Plan (NLCP). The prestigious projects for which HUDCO provided technical consultancy services include:

1. Detail Project Report For Construction of 18 MLD STP at Jwalapur (Zone E-2), Haridwar, Uttarakhand
2. Detail Project Report for Sewerage System In Ahbab Nagar, Jwalapur (Zone E-2) at Haridwar, Uttarakhand
3. Detail Project Report for Sewerage & Sewage Treatment Plant for Tapovan, Uttarakhand

4. Detail Project Report for Abatement of Pollution at Triveni Ghat (River Ganga) Rishikesh, Uttarakhand
5. Detail Project Report For Gangotri Sewerage Scheme District Uttarkashi, Uttarakhand
6. Detailed Project Report for Cleaning of River Sabarmati Under National River Conservation Project Phase – II, Gujarat
7. Under Ground Sewerage/Sullage Scheme for Malkapur Nagar Panchayat under NRCP, Maharashtra



HUDCO has prepared Detailed Project Reports and Feasibility Reports of sewerage projects in different towns/cities of India for total estimated project cost of Rs. 51,193.48 lacs. Some of the towns for which HUDCO has prepared Feasibility Report for Sewerage / Drainage include Bhilwara, Didwana, Alwar, Suratgarh, Pilani, Kuchamancity, Junjhunu, Sikar, Sujargarh. It has also prepared DPR for Bhilwara City and Industrial Sectors of NOIDA