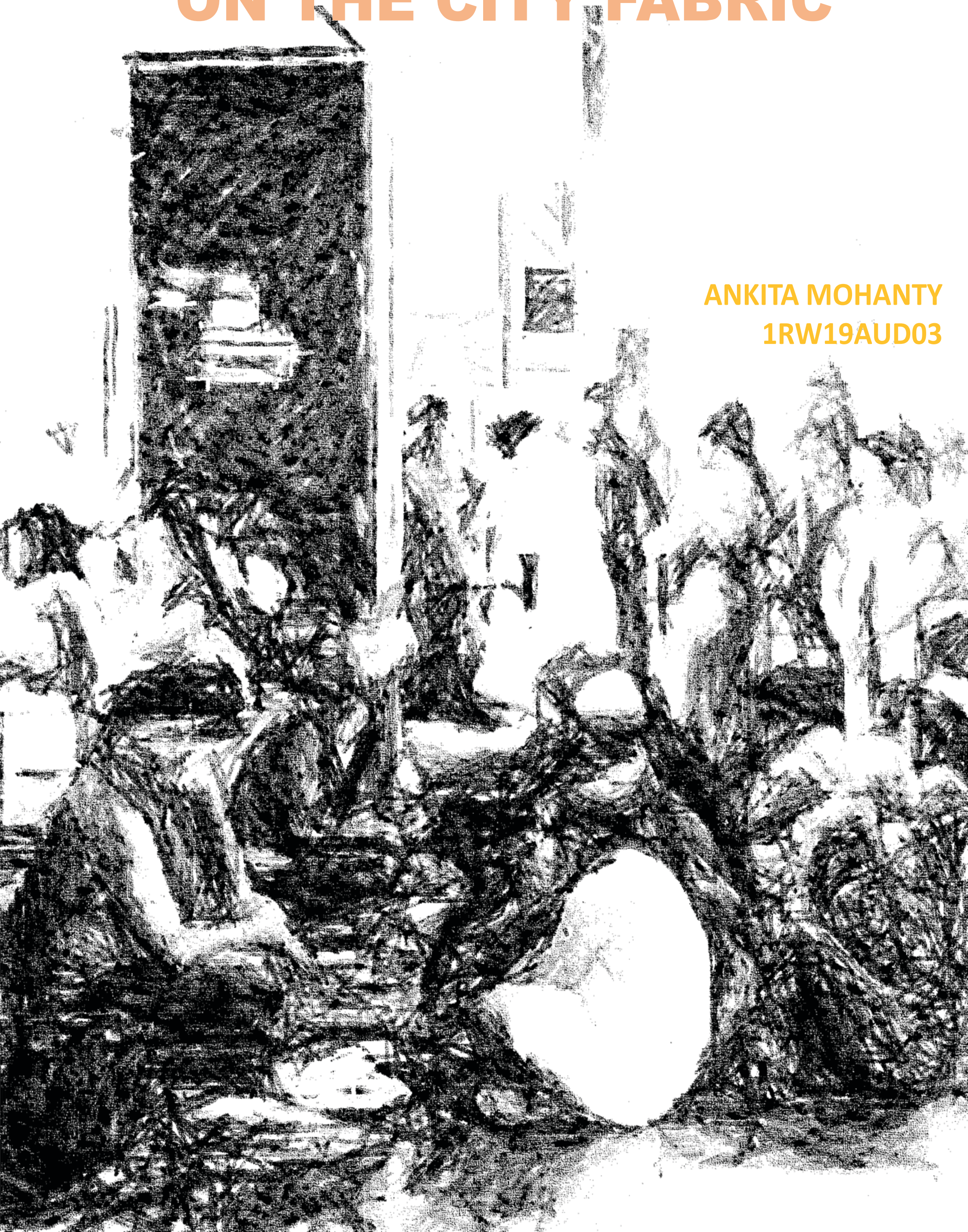


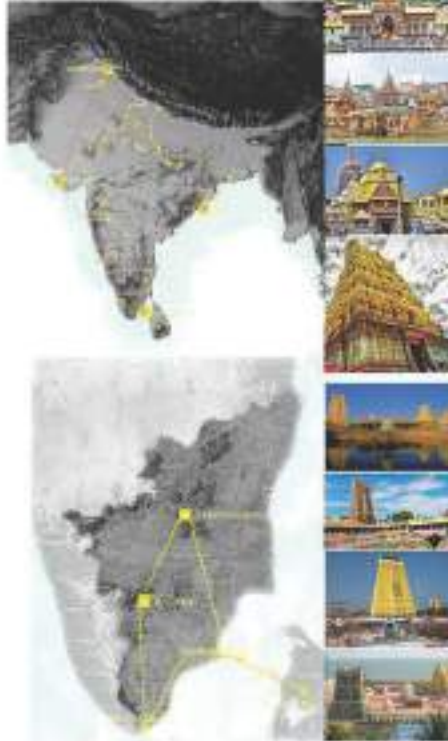
INFLUENCE OF TOURISM ON THE CITY FABRIC

ANKITA MOHANTY
1RW19AUD03



Tourism in India has emerged as one of the major segments of economy. Since time immemorial, people had to walk long distances, or use animals or carts to travel for pilgrimage in order to achieve spiritual pursuits. Rameshwaram is mostly known for the part of the pilgrimage path of the Char Dham Yatra by Adi Shankaracharya, apart from Badrinath, Varanashi and Puri. It is also a part of the South Indian pilgrimage path apart from Kancheepuram, Madurai and Kanyakumari.

HOW DOES THE CHARACTER OF THE PILGRIM CITY OF RAMESHWARAM RESPOND THE INFLUX OF THE TOURIST POPULATION?



KEYWORDS: TOURISM, FLOATING POPULATION, MIGRATION

OBSERVATION:

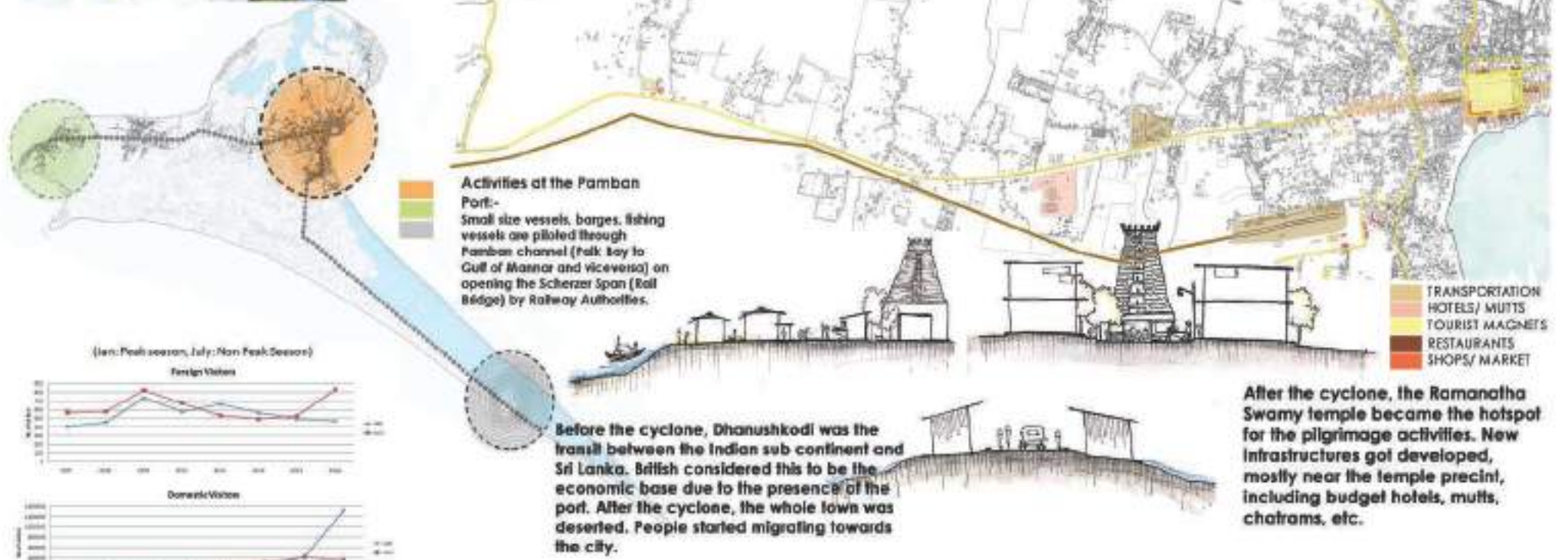
- I. After cyclone, Ramanathaswamy temple became the major hotspot for pilgrimage population.
- II. People migrated towards the temple precinct and started settling for beneficial reasons.
- III. City started growing.
- IV. New buildings emerged to accommodate the floating population.
- V. Traditional fabric is getting modernised.
- VI. Majority of the floating population comprises of elderly people who visit the place for pilgrimage reasons.



PILGRIMAGE	NON-PILGRIMAGE
BUILT HERITAGE - Religious Structures- Temples, Churches, Mosques - Water tanks- teerthams - Traditional houses/ Private heritage- Agraharams, fisherman huts, rural houses INTANGIBLE HERITAGE - Cultural activities- bath at Dhanushkodi, Agribertham, Pilgrimage - Fair & Festival- mahashivratri, vasantutsavam, tirukalyanam - Traditional knowledge- fishing technology, boat making, building construction techniques	NATURAL HERITAGE - Marine Biodiversity- 137 species of coral reefs, sea algae, pearl, sea grass, shell fish, crab, prawn and fishes. - Vegetation- mangrooves, casuarina - Landform- beaches, sand-dunes, lagoons ADVENTURE SPORTS TRAVEL

Economy generated through TOURISM

TRAVEL	FOOD	STAY	SHOP
AIR RAIL ROAD - Bus - Cab - Auto	RESTAURANTS STREET VENDORS MUTTS	COMMUNITY HOMES HOTELS MUTTS LODGES DHARMASHALAS	SEA SHELLS TEMPLE STORES STREET STORES



Mode Of Transport	% of Users
Air	10
Rail	35
Road	55

Month	No. of visits (Peak Season)	No. of visits (Non-Peak Season)
January	2420	2185
March	2420	2258
May	1820	1925
July	2420	1955
September	1820	1325
November	1820	1428
December	1820	1655

Season	Domestic	Foreign	Total
Peak Season (Jan- Mar)	5,100	5,100	11,100
Non Peak Season (Oct- Dec)	5,100	2,800	6,100

Purpose of Visit	Duration of Stay
Aarti Visaharjan/ Shraadh	2-3 days
Char Dham Yatra/ Teertha Yatra	1-3 days
Community Visit	3-7 days
Travel/Tourist	1-2 days

Age Group	Male Visitors	Female Visitors
15-24	5	5
25-34	22	22
35-44	28	30
45-54	55	32
>50	22	22

Frequency	Male Visitors	Female Visitors
Once a week	1	0
Once a fortnight	3	0
Once a month	3	0
Once in 3 months	20	0
Once in 6 months	12	0
Once in a year	12	2
Less Often	54	36

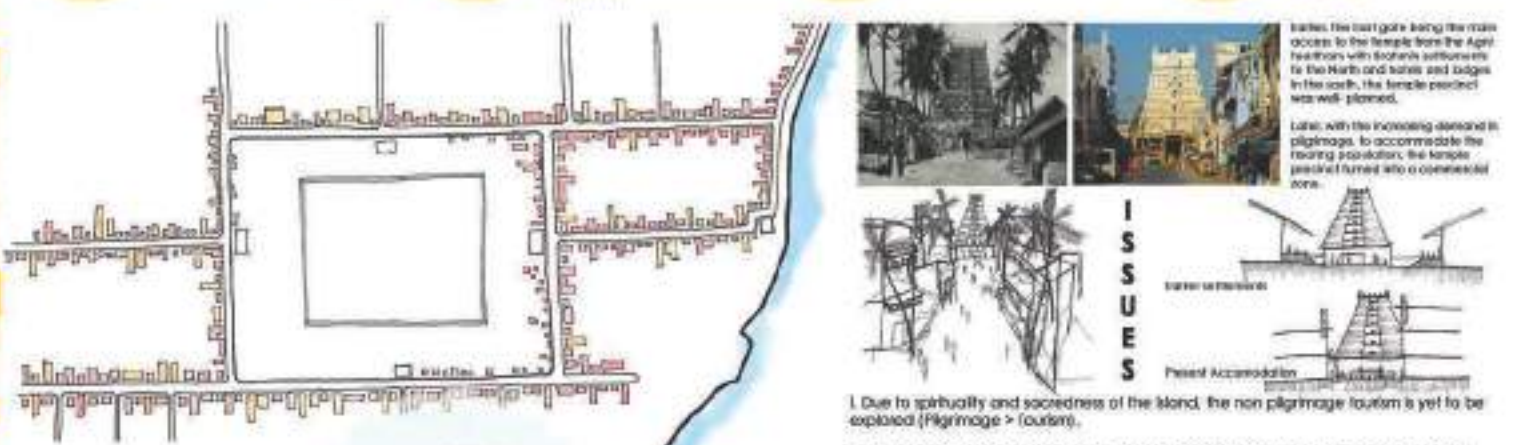
DATA ANALYSIS
 The people visiting Rameshwaram, mostly consists of pilgrimage population who visit the holy island for mostly teerth yatra or other religious reasons.
 The visitors mainly consists of the elderly population, mostly of age group 45 to 60 years and stay here for maximum 1 to 2 days which may vary for few who visit with the community for 3-7 days for specific reasons.

S Unique Cultural Geography, with spiritual connection to Ramayana, and beautiful sceneries, thus making it a significant location for the Tourism.

W - Decrease in rate of local population growth and increase in floating population
 - Lack of infrastructure development.
 - Congestion due to tourist activities

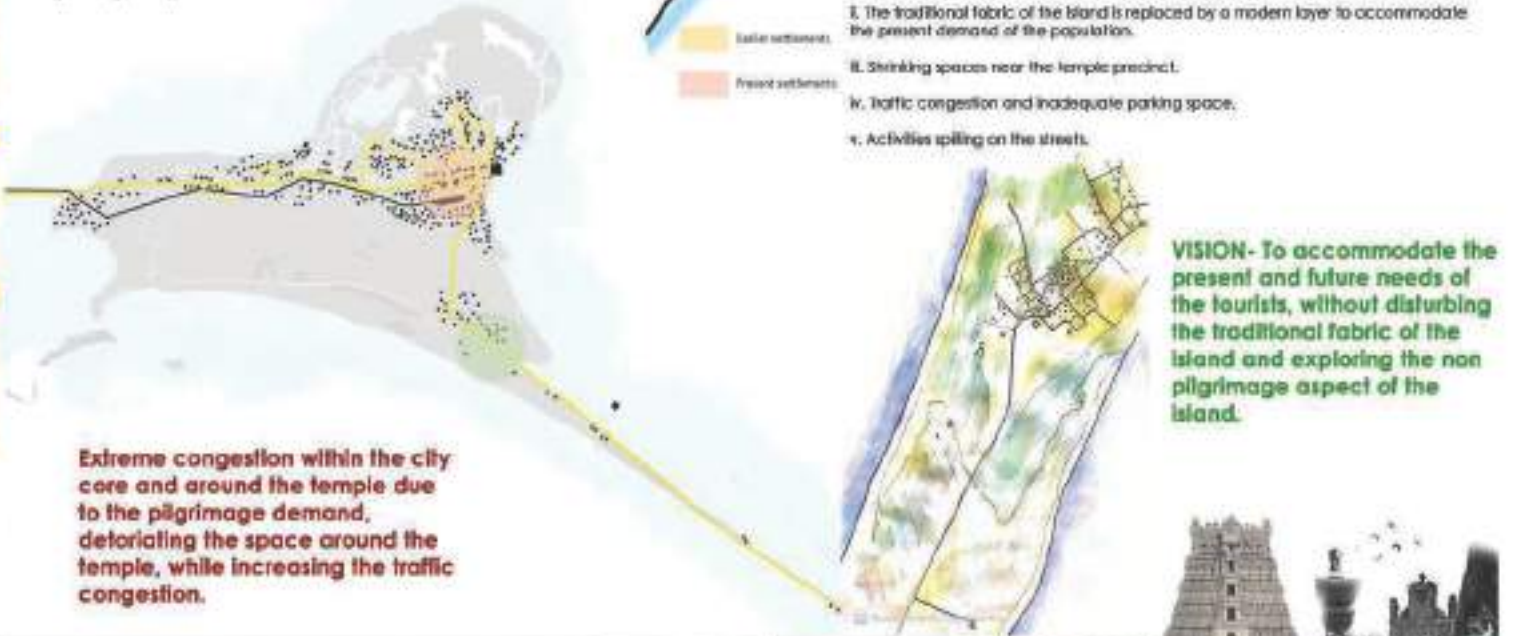
O - Developing the infrastructure to accommodate tourism activities.
 - Potential to emerge as a tourist spot with heritage and ecological conservation

T - Prone to disaster.
 - Inertive economic driver per negatively.
 - Degradation of environment a pollution.
 - Unchannelled private sector participation in tourism related activities.

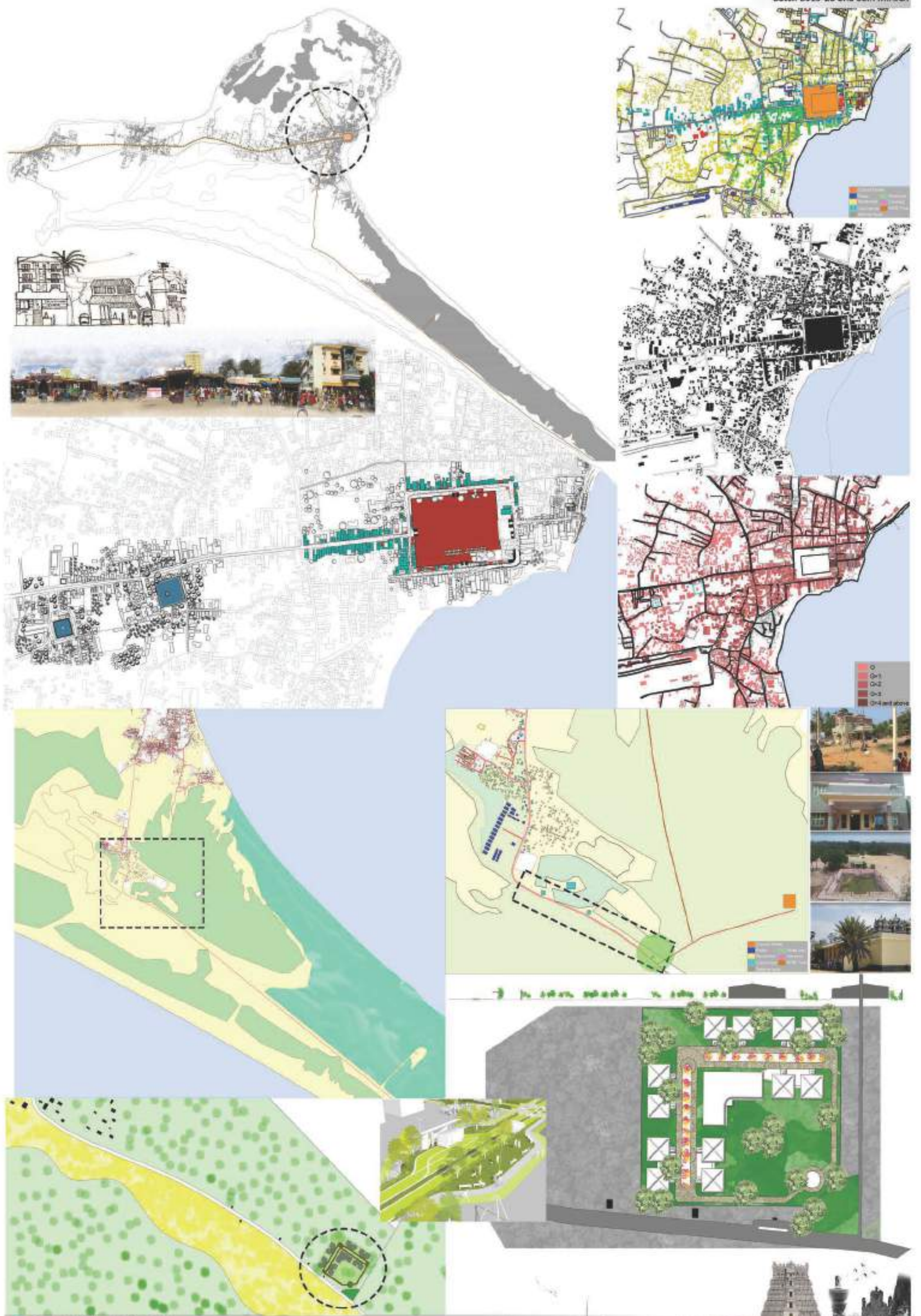


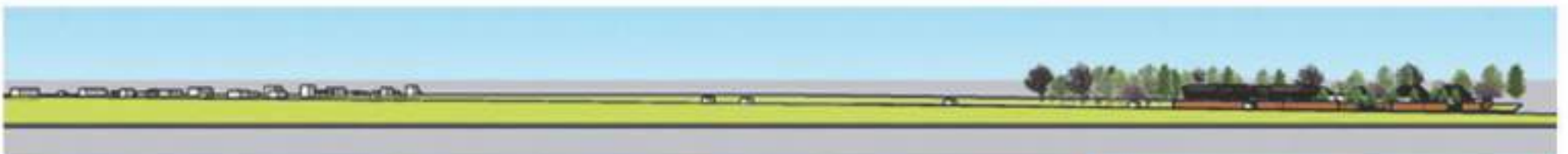
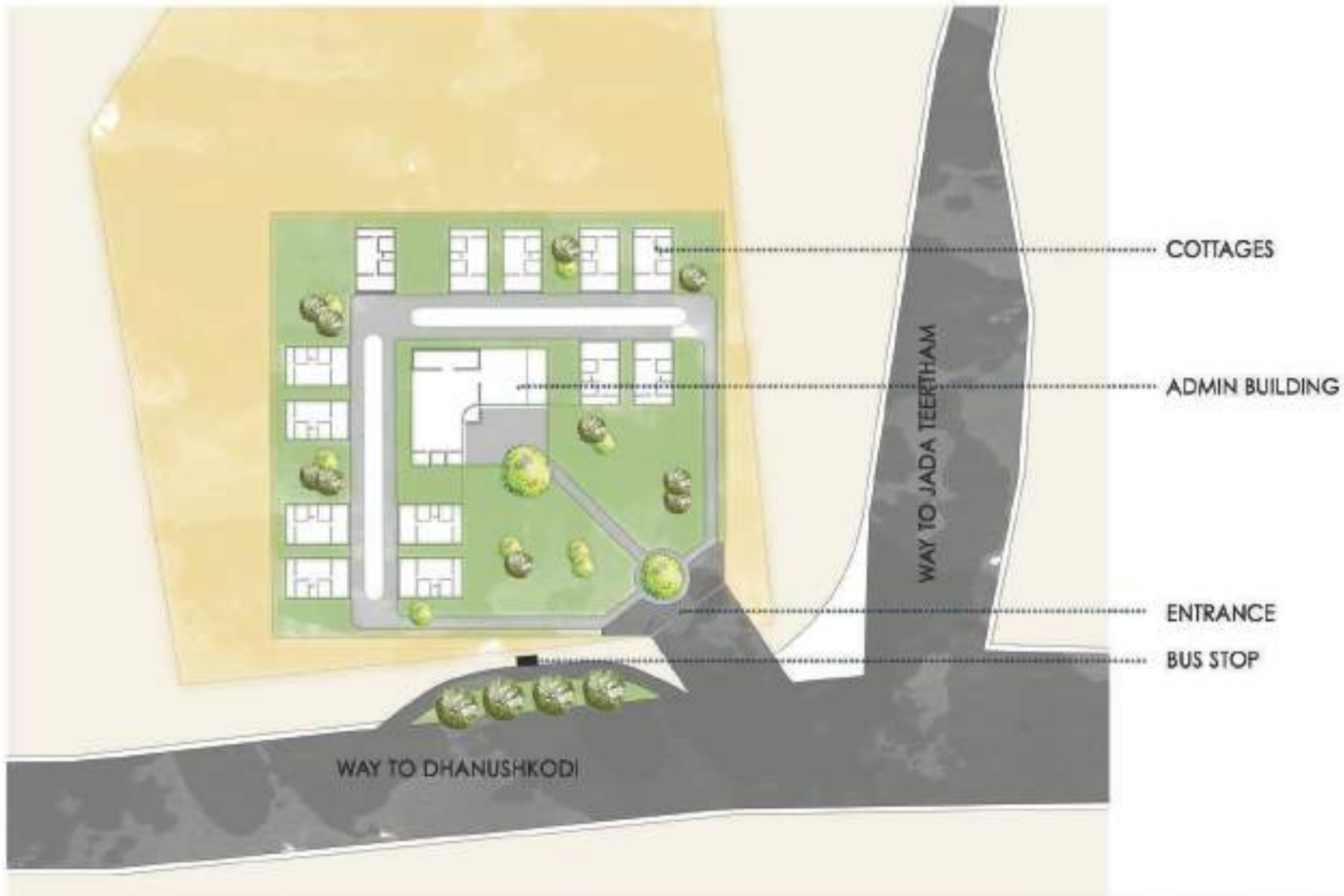
ISSUES

- I. Due to spirituality and sacredness of the island, the non pilgrimage tourism is yet to be explored (Pilgrimage > Tourism).
- II. The traditional fabric of the island is replaced by a modern layer to accommodate the present demand of the population.
- III. Shrinking spaces near the temple precinct.
- IV. Traffic congestion and inadequate parking space.
- V. Activities spilling on the streets.



VISION- To accommodate the present and future needs of the tourists, without disturbing the traditional fabric of the island and exploring the non pilgrimage aspect of the island.





By activating the node, the area gets a new character, thus attracting the tourist population. The jada teertham is enhanced as well as accommodation facility is provided to accommodate the tourist population. This helps in diverting the people who visit the place for non-tourism and ecological activities, thus helping in the management of the traffic congestion near the temple precinct, caused by the non-pilgrimage tourist population.





The first training centre was built in 1979 but later was destroyed in fire by the radicle Hindus. Moses Paulose believes that this land of 3.5 acres was given to them by God to construct the training centre to train missionary students and send them abroad.

The project was funded by John Hosten and family of United States. It took 10 years to be completed. It started with the team of 8 people and 500\$ and then after 10 years, stands in the present condition. Capacity- 500 students

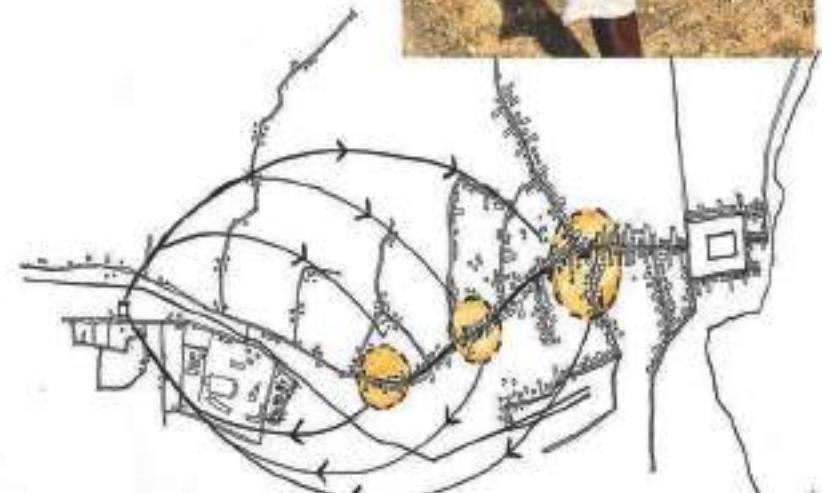
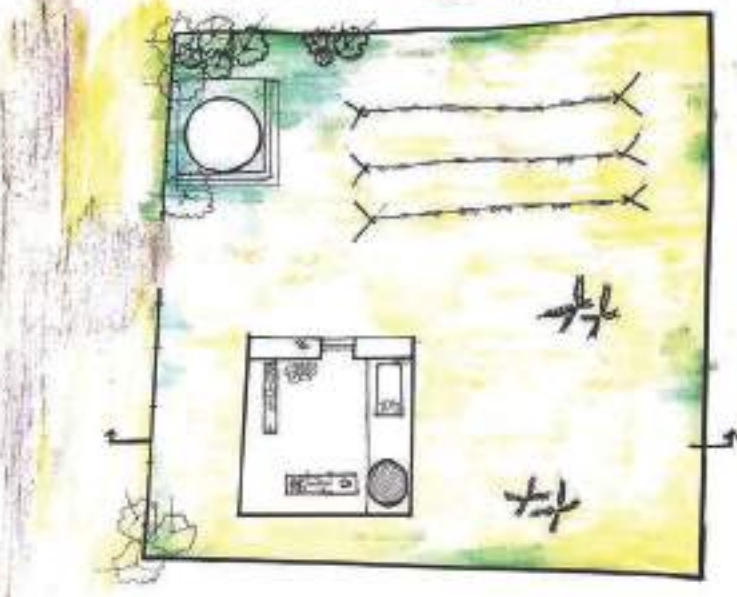
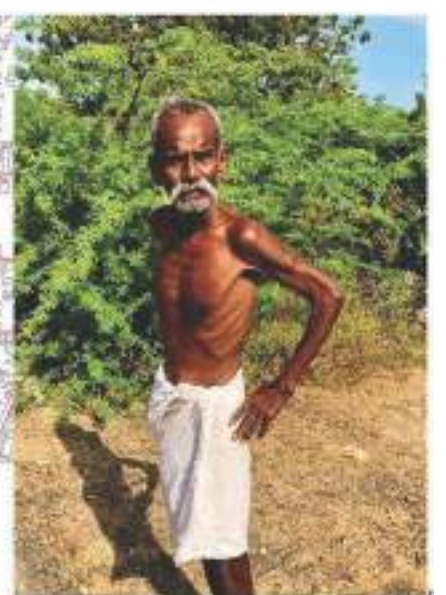


RAMESHWARAM

Journeying the sands of time through Sthala, Teertham and Alaya

SACRED PRECINCT STUDY

ANIKITA MOHANTY 2ND SEM USN 18W19AUD03



Bajrang Reddy is a washerman residing near Thangachimadam in Rameshwaram. He, accompanied by his brother, has a cleaners unit in Thandachimadam. They travel to various lodges every alternate days to collect all the laundry items by afternoon in a bike. They come back, clean the clothes and bedsheets, dry them, iron them and return it back to the lodges by evening.

The only problem they face is they have to travel a long distance to collect the items in bike if the hot weather in the island for living.



RAMESHWARAM

Journeying the sands of time through Sthala, Teertham and Alaya

STAKEHOLDER STUDY

ANIKITA MOHANTY 2ND SEM USN 18W19AUD03



INQUIRY : How does pilgrimage as an activity triggers the spatial pattern of urban builtups in Rameshwaram.

HOW DOES ONE DEFINE A PILGRIMAGE OR PILGRIM PATH ?



For Hindus, pilgrimage (Tirtha-yatra) is an act and process of **spiritual crossing**; to cross the sacredscape is to be transformed. Pilgrimage is a spiritual quest—a **guiding force unifying divinity and humanity** it is a search for wholeness. Ultimately the wholeness of landscape and its sacred and symbolic geography creates a 'faithscape' that encompasses sacred place, sacred time, sacred meanings, and sacred rituals and embodies both symbolic and tangible psyche elements in an attempt to realise humankind's identity in the cosmos. The act of pilgrimage, including the journey, activities, and experiences of companionship, is itself a ritual with transformative value, a reinterpretation of the idea of "experience". This where one begins. The Hindu term Tirtha-yatra itself denotes this quality. According to Hindu beliefs, by undertaking a pilgrimage, an individual is transformed and begins life anew.

INTERCONNECTION OF SACRED SPACE AND SACRED TIME :

Interconnection of individual to universal humanity. The act of pilgrimage starts from inner space to outer territory, and later in the reverse manner returning to the home. Pilgrimage is a way to heal the body and the soul by walking and opening the soul to the spirit inherent in Mother Earth.



FOUR CONNOTATIONS :



- 1) a route to a place where one can receive power.
- 2) the bank of a river where people can dip in the water as a rite of purification.
- 3) the sacred site itself which possesses the power of manifestation.
- 4) places that sacrilized based upon divine happenings and work of the god that took place there.

PILGRIMAGE IN THE CONTEXT OF RAMESHWARAM :

Rameshwaram is one of the most important pilgrim centre in India. Hailed as a **VARANASI OF SOUTH**. Adi Shankaracharya established Chardham. Badrnath(North), Rameshwaram (South), Jagannath Puri (East) and Dwaraka (West) in four corners of Bharat teaching the principle of Advaita-unity of existence.



FOUR CONNOTATIONS : RAMESHWARAM



RAMAR PADAM: STHALA where Rama stood on Gandhamadana Pervatham and planned the visit to Lanka. Pilgrims visit here to worship lord Rama's foot print.
RAMANATHASWAMY TEMPLE: The Holy abode of the Hindu God, Ramanathaswamy and one of the 12 jyothirlinga temples. It is a virtual paradise for the devout. No Hindu's journey is complete without a pilgrimage to both Varanasi and Rameswaram for the culmination of his quest for salvation and is hallowed by the epic 'Ramayana'

THEERTHAMS : Rameswaram has 64 Theerthams and 22 therthams in the form of wells in various parts of the temple. Taking bath in all these Theerthams purify the body as well as the mind. It is believed that this water is holy and also having medicinal qualities. At Kodi Theertham pilgrims take their bath lastly and end their pilgrimage of Rameshwaram.

PILGRIM PATH : It is believed that tradition of pilgrim path even lord Rama has followed himself. *navapashanam-devipatnam-bhairava theertham-lakshamangunda ramatheertha-agnitheertha-agni theertha-jetei - rameshwara temple-kodi theertha*



WHAT DOES A PILGRIMAGE MEAN TO ITS CITIES?

The Pilgrim cities attracts visitors and form a large part of India's alluring cultural heritage which includes tangible and intangible and are also a major part of its tourism, which contributes to the social, cultural and economic development of the particular area or region.

This will create a good platform to exhibit their culture, foodstyle, tradition, art and architecture, literature of the place.

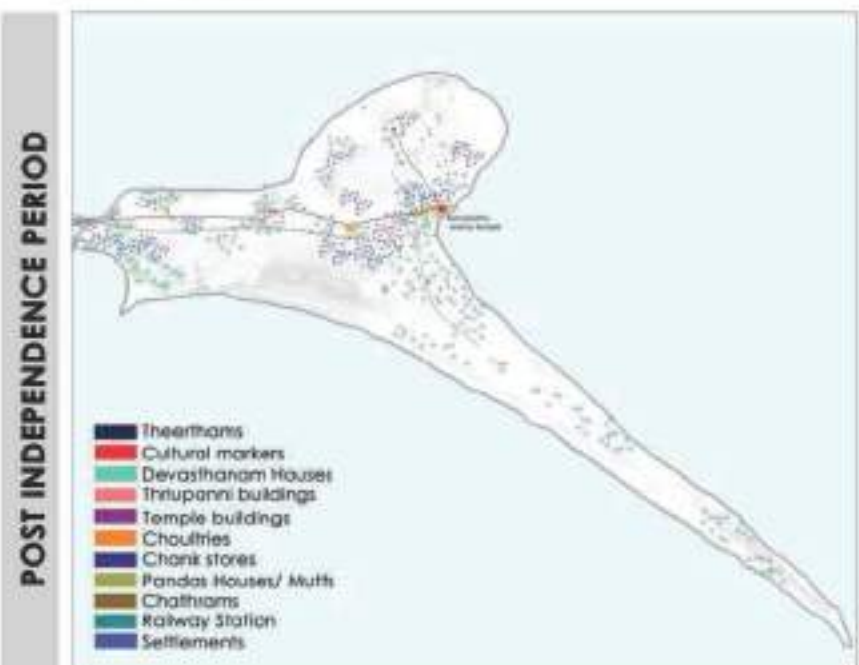
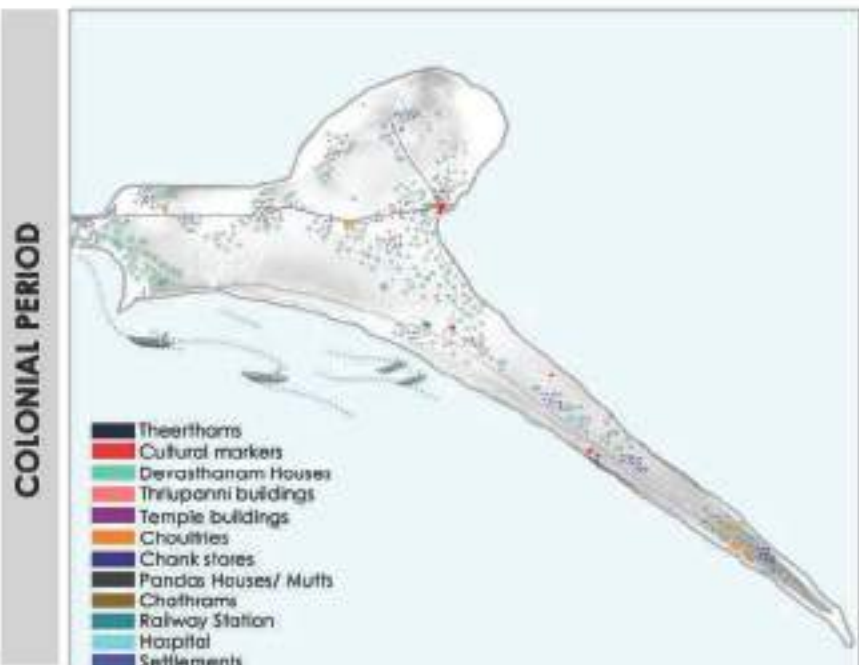
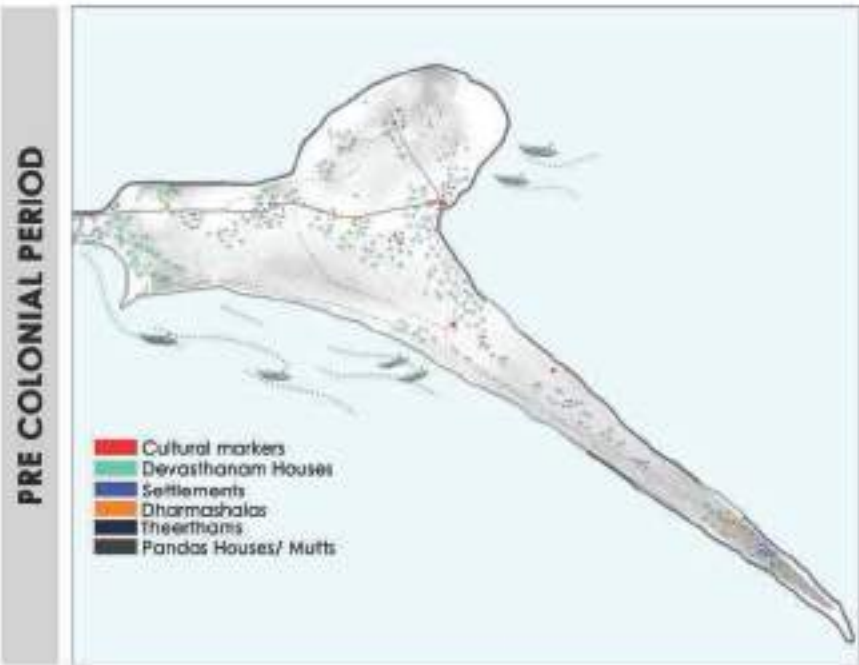
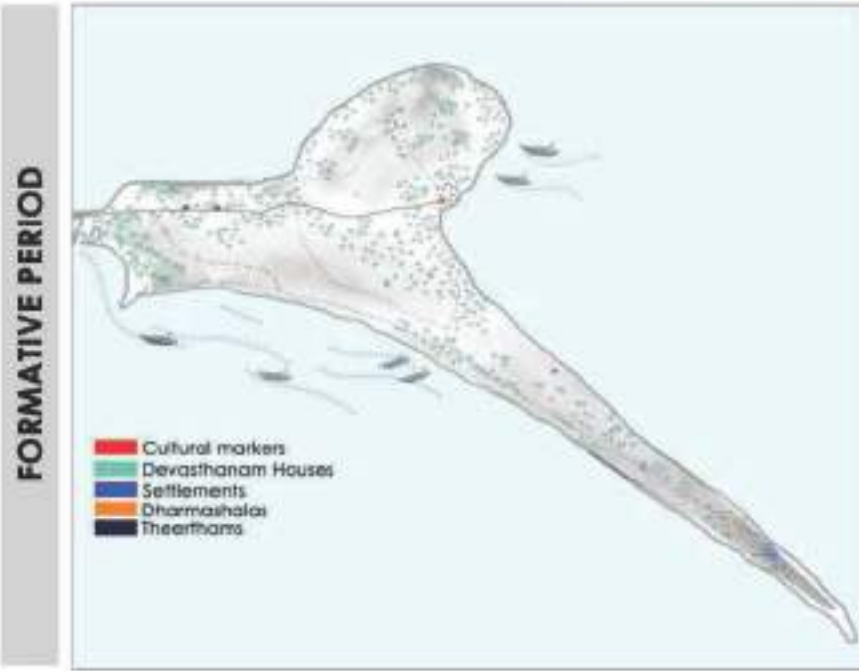
These places attract visitors and their influx affects the natural and built environments of these places. With their iconography and symbolism, they also form the focal points for cultural exchange and conflicts across several levels, ranging from ownership and custody to the physical use of the site as a resource for multiple forms of tourism including pilgrimage, religious and cultural tourism, and mass tourism.

IN THE CONTEXT OF RAMESHWARAM :

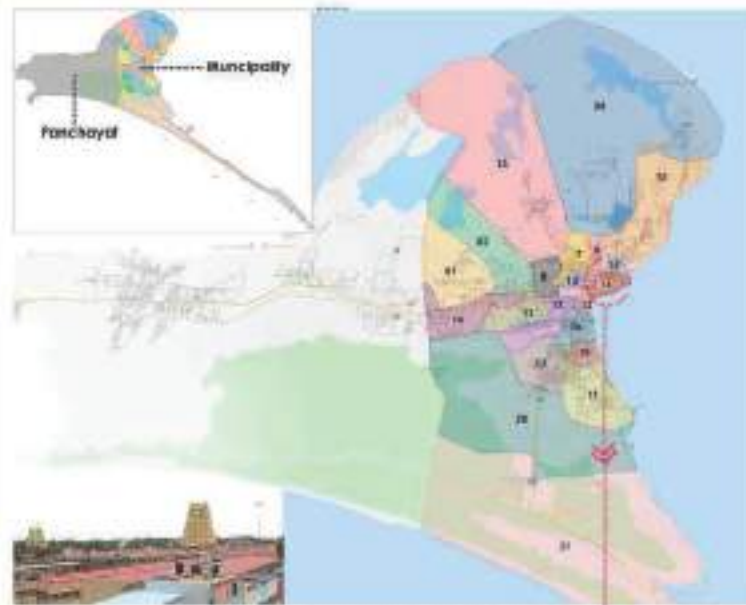
Apart from the cultural and sacred heritage Rameshwaram's economy surviving through Pilgrimage and fishing and coastal related activities. where pilgrimage stands first in the lane. Majority of the 60-70% of the people solely depending on pilgrim activities for their income including regional population.

- Creating a oppurtunity for religious tourism as well as adventourous water sports activities.
- Creating a well oppurtunities for developing physical, social and transportation infrastructures.
- Improving the real estate business with creating higher land values .
- supporting in economy generation for informal activities, hotels and restuarants, coastal related chunks and sea shell business and service sectors.
- Creating a job oppurtunities for women by supporting their hand craft works.
- Change in the built environment and spatial pattern to accomodate influx of population and for ritual activities.





DENSITY MAPPING OF RAMESHWARAM.



INFERENCE:

Development pressure for the conversion of residential areas into highrise accomodation facilities to catering pilgrims.

DENSIFICATION OF CORE AREA:

Due to new trends in pillgrimage the population density of temple and its surrounding increased. This disturbed the visual accessibility of temple gopurams, which was once served as a landmark for pilgrims.

This also create a big impact on land ownership and land value of the sites around temple surroundings.

This creates a violation of landuse, bye laws and regulation to make use of maximum builtspace.

DENSITY DATA OF RAMESHWARAM ACCORDING TO 2011 CENSUS DATA.

WARD WISE POPULATION

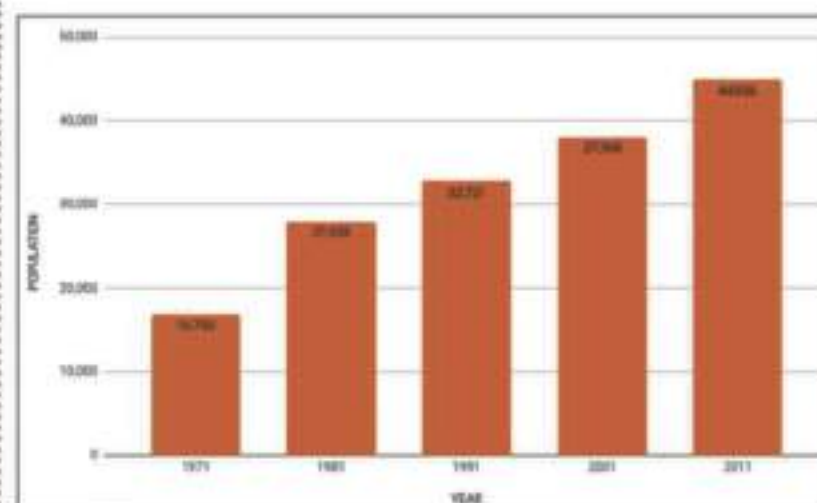
Wards	Population	Wards	Population
Rameswaram Ward No 01	483	Rameswaram Ward No 12	3,523
Rameswaram Ward No 02	820	Rameswaram Ward No 13	3,434
Rameswaram Ward No 03	734	Rameswaram Ward No 14	4,560
Rameswaram Ward No 04	1,924	Rameswaram Ward No 15	2,850
Rameswaram Ward No 05	773	Rameswaram Ward No 16	1,076
Rameswaram Ward No 06	3,059	Rameswaram Ward No 17	1,060
Rameswaram Ward No 07	3,001	Rameswaram Ward No 18	2,952
Rameswaram Ward No 08	2,753	Rameswaram Ward No 19	2,412
Rameswaram Ward No 09	1,700	Rameswaram Ward No 20	2,176
Rameswaram Ward No 10	2,470	Rameswaram Ward No 21	1,904
Rameswaram Ward No 11	1,477		

INFERENCE:

The density of population is high in ward numbers -12, 13 and 14 respectively. i.e. Ramanathaswamy temple and settlements around it. This shows development of the core area.

The administrative limit of the town covers an area of 5300ha giving with a gross density pph as per the population in 2011.

The town density suggests that there is enough room for densifying as suggested by guidelines of town development which reccommands a density of 75-100pph for towns with population less than 50,000 persons.



Year	Area	Population	Density (persons/ha)
1971	5224	16,755	3
1981	5224	27,928	5
1991	5236	32,721	6
2001	5300	37,968	7
2011	5300	44,865	8



RAMESHWARAM



	PAST	PRESENT	INFERENCE
CITY SCALE	<p>Legend: Cultural markers (Red) theertham (Blue) dharmashalas (Pink) settlements (Black) pilgrim path (Orange)</p> <p>existence of breathing spaces between built space and accessible urban voids</p> <p>along the pilgrim paths shades of trees, there were stone paved seatings which were also act as a gathering spaces. dharmashalas were also placed to help pilgrims to rest.</p> <p>typology of dharmashalas had courtyards, semi open spaces in the frontyards to create circulation and social spaces for pilgrims.</p> <p>theerthams were the main source in early times which catered pilgrims for their livelihood and which were also acted as a social space for local people.</p>	<p>Old pilgrim path New pilgrim path</p> <p>along the older pathways dharmashalas have become dilapidated neither conserved.</p> <p>Along the main streets of rameshwaram buildings are tightly packed without any setbacks and road edges are marked by building line without any pedestrian walkways.</p> <p>Theerthams are restricted to ritual activities and influx of pilgrims created a less accessible place to local people. Theerthams are covered by hotels and lodges creating dense fabric around it and less urban voids.</p>	<ol style="list-style-type: none"> 1. Change in the pilgrim path due to new transportation networks and cyclone has changed the spatial pattern of town. Influx of pilgrims creating a pressure on built fabric which are tightly packed without any breathable spaces. 2. theerthams and temples are mainly focused on catering pilgrims and local people are less accessible. 3. Lack of urban voids and social spaces around cultural markers 4. Along the network of cultural markers, absence of pause points or resting places. 5. buildings, informal activities are abutting main roads and absence of pedestrian paths.
TEMPLE PRECINCT SCALE	<p>presence of hierarchy of streets. such as car streets around the temple, pedestrian streets, elephant street vehicular paths.</p> <p>temple prakaras were accommodating many pilgrims.</p> <p>mutts had open spaces within their compound to conduct rituals and religious events</p> <p>truppam buildings were constructed to maintain temple activities</p> <p>temple had green open spaces near theerthams which were acting as voids.</p> <p>south-east side of the temple had huge open space for conducting temple events and was a jaatra space.</p> <p>Sannathi street (elephant street)</p>	<p>Legend: INFORMAL ECONOMIC ACTIVITY (Blue) RELIGIOUS INSTITUTIONS (Orange) FORMAL ECONOMIC ACTIVITY (Green) RESIDENCES (Yellow) a. local residences, commercialised their residences to the need of pilgrimage. b. migrants, who came and settled near temple due to economic opportunities.</p> <p>Change in the street pattern land use and building use.</p>	<ol style="list-style-type: none"> 1. movement pattern of temple inflow has changed due to the influx of pilgrims. 2. highly densed area creating a high value for land area around temple surrounds due to which causing a violation in the land use and building use. 3. increase in the land value creating a opportunity for landowners, where owners tend to utilise complete lot area without providing any set backs due to which buildings are way much compacted without any social spaces and voids. 4. creating a opportunity for economy generation in formal and informal sectors.
BLOCK LEVEL	<p>houses in the middle streets had a frontyard semi open space as well as backyard open spaces which connects to the other pedestrian streets and for other livelihood activity.</p> <p>temple priest house, had a separate open space for ritual activities, cow shed and green space.</p> <p>housing typology and circulation</p> <p>community housing typologies had their own community social spaces for gatherings and cow sheds, which were maintained by community itself and it is restricted for other communities.</p> <p>Community housing typology in north-east road network.</p> <p>COURTYARD FOR LIGHTING FRONTYARD BACKYARD</p>	<p>modification in built typology to accomodate pilgrims. residences have commercialized to achieve income, which creating a lack of open spaces within the unit level which also creating a lack of connectivity.</p> <p>roads are marked by building edges leaving no space for pedestrians path, violation of setbacks and increase in the building height creating a visual dominance and abstracting view.</p> <p>MIDDLE STREET</p> <p>Change in the typologies of mutts got commercialized to accomodate pilgrims and to conduct rituals creating a loss of open space to carryout mutt events leads to encroachments of other open spaces near sea edges and residential blocks.</p>	<ol style="list-style-type: none"> 1. change in the built pattern of neighbourhood residences of temple precinct. 2. frontyard of residences are changed into lockerrooms or for the other facilities to cater pilgrims where open backyards are converted into home stays, lodges to accomodate pilgrims way to income generation. 3. lack of social spaces among the residential blocks and issue of accesability to neighbourhood places.

ISSUE : CONNECTIVITY OF STREETS.

Cluster of houses lacking the street connectivity in Muslim community near Pamban area.



The development of street network mainly focused in the temple precinct where large number of pilgrims accommodate and the street networks of other places than pilgrim routes are neglected.

affecting on local fishing economy due to the less accessible connecting network from fishing village to Rameshwaram market



Car parking +space to accommodate 135 heavy vehicles locker room + commercial shops

Lack of utilization of urban infrastructures which were designed for pilgrims due to the absence of proper street connecting to it.



fishing village

since the only single accessible road network between market and fishing village. Clash between pilgrim network and local economy network.

With the increase in density near temple, the commercial activities are pushed on to the footpaths, pushing pedestrian into streets. lack of pedestrian friendly streets near temple precinct. Lack of buffer or screening of roads causing inconvenience for the pedestrian movement.



HARBOUR

The harbours are the main network of local fishing economy and it lacks connectivity of road networks from jetty to main roads and other fishing areas. The Tangachi madam harbour does not have any well developed accessible network to main streets which directly affecting the economy of fishing. Lack of connective networks affect negatively in local economy.

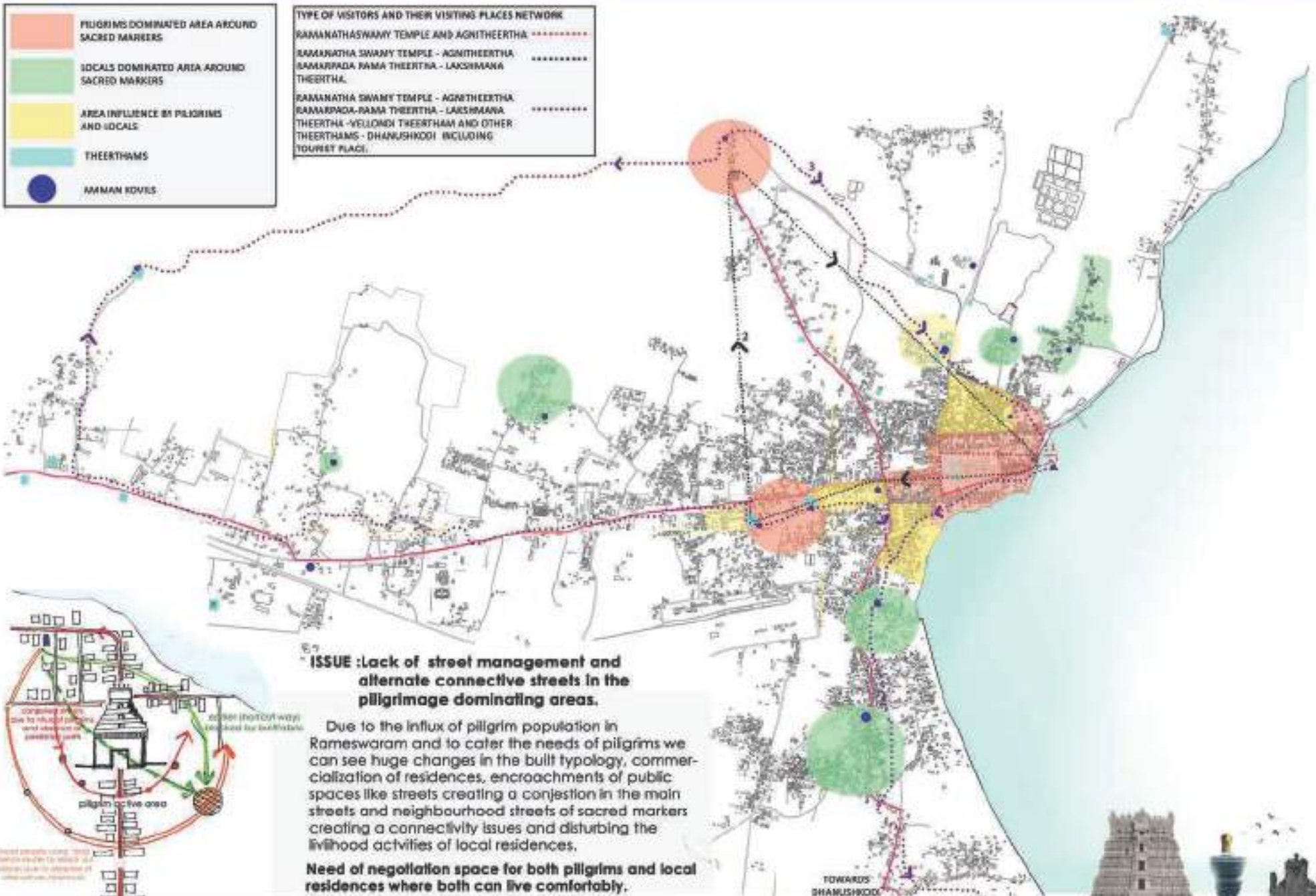


ISSUE MAPPING : PRECINCT LEVEL

	PILGRIMS DOMINATED AREA AROUND SACRED MARKERS
	LOCALS DOMINATED AREA AROUND SACRED MARKERS
	AREA INFLUENCE BY PILGRIMS AND LOCALS
	THEERTHAMS
	AMMAN ROVES

TYPE OF VISITORS AND THEIR VISITING PLACES NETWORK

- RAMANATHASWAMY TEMPLE AND AGNITHEERTHA
- RAMANATHA SWAMY TEMPLE - AGNITHEERTHA, RAMARIPADA RAMA THEERTHA - LAKSHMANA THEERTHA.
- RAMANATHA SWAMY TEMPLE - AGNITHEERTHA, RAMARIPADA-RAMA THEERTHA - LAKSHMANA THEERTHA - VELLONDI THEERTHAM AND OTHER THEERTHAMS - DHANUSHKODI INCLUDING TOURIST PLACE.



ISSUE :Lack of street management and alternate connective streets in the pilgrimage dominating areas.

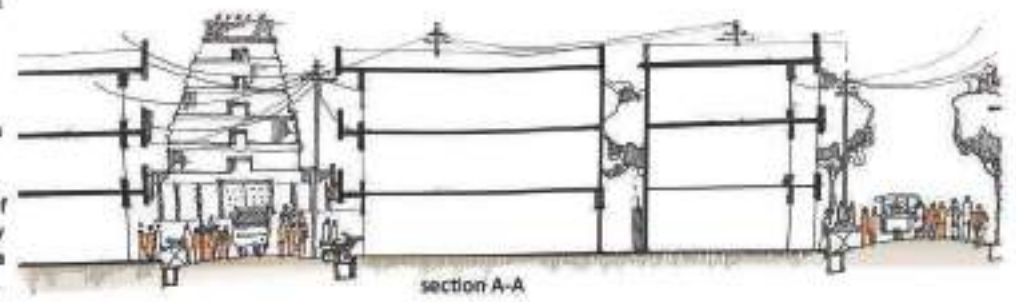
Due to the influx of pilgrim population in Rameshwaram and to cater the needs of pilgrims we can see huge changes in the built typology, commercialization of residences, encroachments of public spaces like streets creating a congestion in the main streets and neighbourhood streets of sacred markers creating a connectivity issues and disturbing the livelihood activities of local residences. Need of negotiation space for both pilgrims and local residences where both can live comfortably.

PILGRIM DOMINATING SPACES :



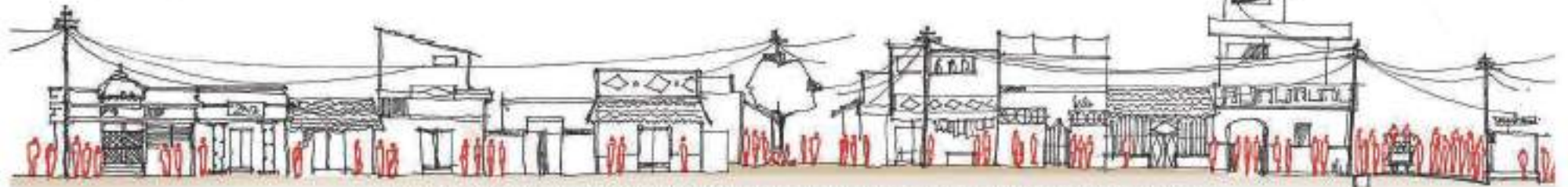
demonstrating area :middle street of Rameshwaram

residences in the pilgrim dominated areas are having an accessibility issue. Connectivity to other places only through main roads. Influx of pilgrims, locals, vehicles, encroachment of main connecting streets by informal activity creates a congestion in main roads.



section A-A

The transformation in the built typologies, commercialization and increase in the land values are the reasons to violate the setback rules and it further causes lack of secondary and tertiary street connectivities.

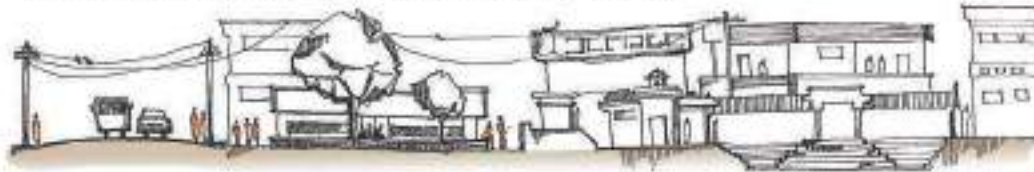


Pilgrim movements in North-east street, which is connecting to Agnithiertham road (parallel street of east car street). pilgrims occupying parallel streets for their movements due to overcrowding of main streets due to the lack of proper street design guidelines to cater the influx of pilgrims, which in return it disturbs the livelihood activities and movement of local people.

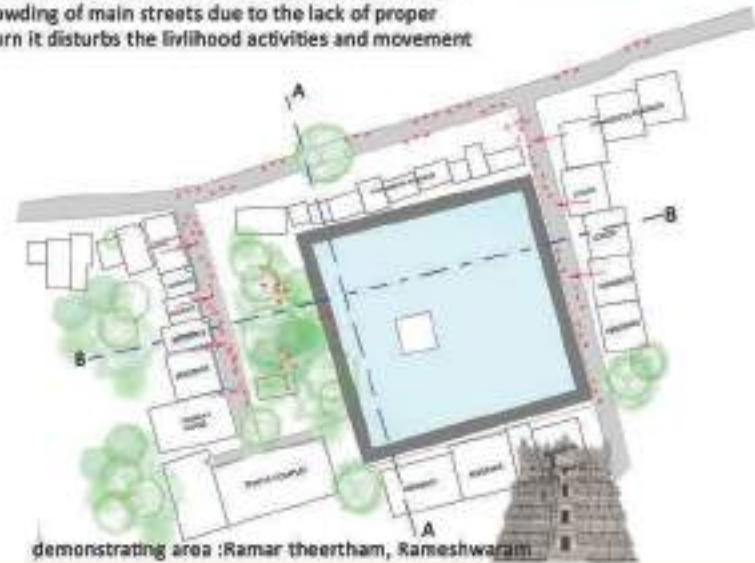


Section B-B

The common shared streets between pilgrims and local people. Street is the part of the pilgrim network and residences around theerthams doesn't feel comfortable to access the same street due to the congestion of streets.

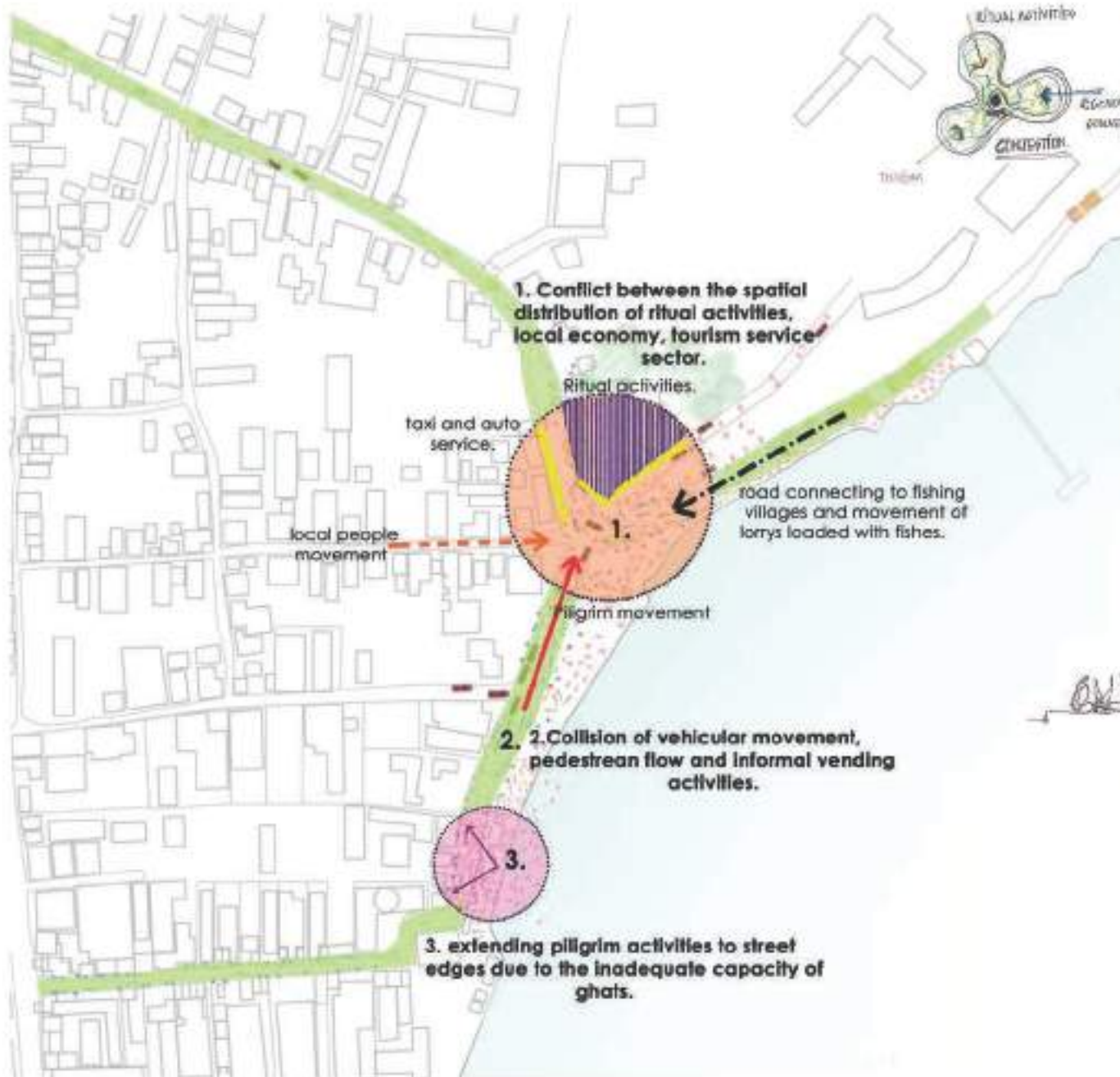


Section A-A



demonstrating area :Ramar theertham, Rameshwaram

ISSUE MAPPING : AREA OF INTERVENTION



1. Conflict between the spatial distribution of ritual activities, local economy, tourism service sector.

Ritual activities.

taxi and auto service.

local people movement

1.

road connecting to fishing villages and movement of lorries loaded with fishes.

2.

2. Collision of vehicular movement, pedestrean flow and informal vending activities.

3.

3. extending pilgrim activities to street edges due to the inadequate capacity of ghats.

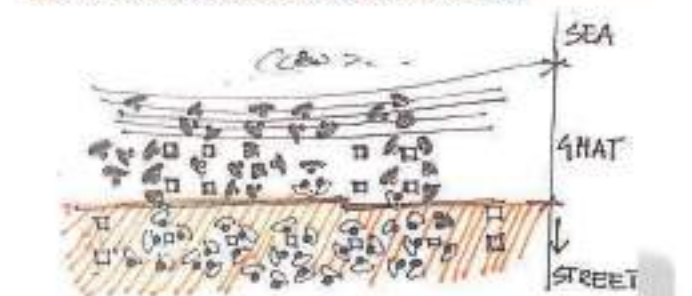
ISSUE #1 : CONFLICT BETWEEN THE SPATIAL DISTRIBUTION OF RITUAL ACTIVITIES, LOCAL ECONOMY AND TOURISM SERVICE SECTOR.



ISSUE #2 : COLLISION OF VEHICULAR MOVEMENT, INFORMAL VENDING ACTIVITIES AND PEDESTREAN FLOW.



ISSUE #3 : EXTENDING PILGRIM ACTIVITIES TO STREET EDGES DUE TO THE INADEQUATE CAPACITY OF GHATS.



Identifying the shared street networks between local and pilgrims redesigning **pedestrian friendly streets** and developing hierarchy of new street design regulations, bye laws to the pilgrim dominated areas.

Redefining the **ghat edges** for making the entire ghat useful by reguvenating the redundant spaces to avoid extention of ritual activities to street.

Reappropriating **Node** as multifunctional spaces which acts as **activity centre** and enhancing the ease circulation movement at the nodes.



1. ACCESS

Develop pedestrian friendly building edges and introducing continious pedestrian network that surrounds the temple

2. ACTIVATE

Activate node and surrounding edges through different public spaces like commercial plaza, gathering spaces, ritual spaces, play area, food court, open library and multifunctional spaces.

CASE STUDY : FORT MANAGEMENT PLAN

The Fort Management Plan was first initiated by the UDRI in 2003 as a natural progression to its area wise studies of the various fort precincts and heritage building surveys started in the 1990.

UDRI drafted the Special Development Control Regulations (DCR) for the Fort area. These have been forwarded to the Maharashtra Heritage Conservation Committee for review and comment. It is intended that the Special DCR's will form an integral part of the new Development Plan for Mumbai that is currently being prepared by MCGM (Municipal Corporation of Greater Mumbai.)



This project has been initiated under the Fort Management Plan. The internal streets of Fort area are overcrowded with parked vehicles, street food vendors, hawkers, etc. making it difficult for pedestrian commuters to navigate the area. Removing one of the elements — like vehicular traffic — can greatly reduce the congestion in the streets. This was one of the recommendations in the Fort Management Plan initiated by UDRI in 2003.

The conversion of streets may begin on a trial basis — making it pedestrian friendly for a few hours on weekdays and extending this to weekends. Soft pedestrian-friendly policies may be slowly adopted in phases to reclaim the streets. Later, once the space is reclaimed, physical interventions may follow. The eventual results should be a fully pedestrian-friendly street, free of motorized vehicles.

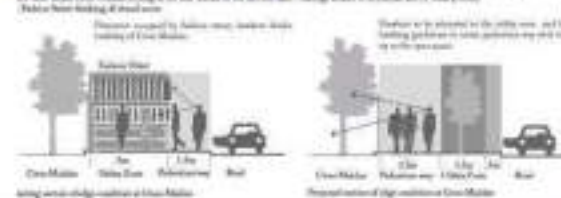
DESIGNATED OPEN SPACES USED AS PARKING

Flora Fountain, Wellington Fountain and the courtyard inside Ballard Estate should be converted into street pedestrian plaza.



Issues regarding open spaces

VISIBILITY
All open spaces have been enclosed from view. One of the main issues is the lack of visibility of open spaces. This is due to the way the streets are laid out, which often blocks the view of open spaces. This can be improved by creating a network of streets that provide a clear view of open spaces.



Introduction of new policies and design :

Soft pedestrian-friendly policies such as:
Re-price parking and encourage short term parking only initially. Removal of the parking entirely in phases. Painting and extending the sidewalks and reducing vehicular lanes simultaneously. Making the road one way eventually reducing vehicular movement. Establish and enforce timings for loading and unloading of service vehicles. Installing retractable bollards for restricting vehicles.

Physical interventions such as:
Installation of street furniture, signage, lighting etc. Retractable stalls for hawkers, Eatery stalls with open seating area, exhibition stalls, etc.

THE NODE WHICH IS ALWAYS ACTIVE BY THE PILGRIMS, LOCALS AND TOURISTS WITH A PROXIMITY DISTANCE OF GHAT -RITUAL PLATFORM, WATER SPORT ACTIVITES, LACKS ITS IMAGIBILITY.

CONSIDERING THE REDESIGNING PEDESTREAN FRIENDLY STREETS AND INDUCING SOCIAL INTERACTIVE SPACES AT NODE FOR BOTH PILGRIMS/ TOURISTS AND LOCAL RESIDENCES WHICH TRIGGERS AN ECONOMIC OPPURTUNITIES FOR LOCAL PEOPLE.



VISION

ENCOURAGE ACTIVE TRANSPORTATION AND SAFE PEDESTREAN FRIENDLY STREETS

interventions that support walkability and safe pedestrean friendly street for both pilgrims and local residences through new design strategy.

ACTIVATE STREETS FOR NEW USES AND PLAY

Street space, ranging from parking spaces to entire blocks, can serve a variety of functions. In addition to mobility, streets can be programmed as places to play and socialize.

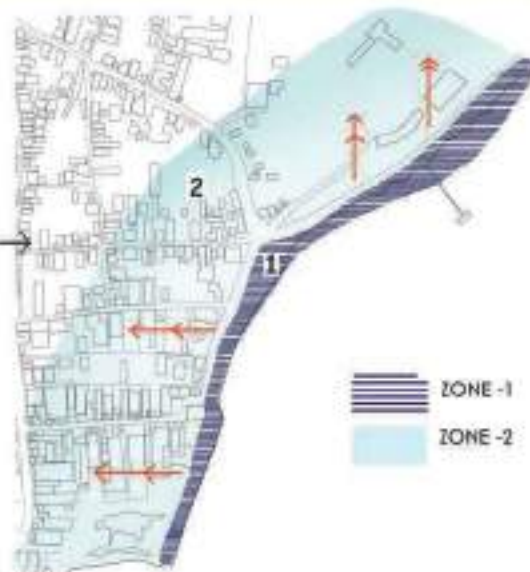
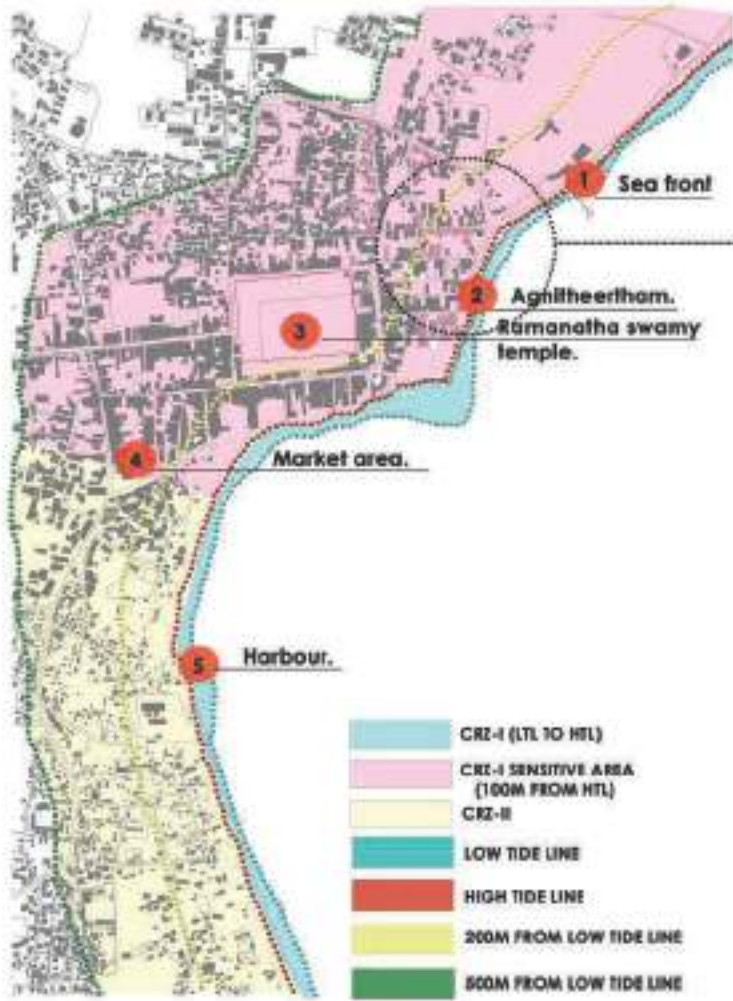
STRENGTHEN NEIGHBORHOOD INTERACTION

Adaptations to the right-of waythat provide invitations for people to stay and interact are vital to livable and dynamic neighborhoods. These changes provide a measurable economic and social inftrstructure to local communities.

ANALYSIS OF QUALITIES OF URBAN STREET -INTERVENTION AREA

STREET QUALITIES	STRENGTH	WEAKNESS	OPPURTUNITY	THREATS
IMAGEABILITY	<p>LANDMARK - AGNITHEERTHAM GHAT and EAST GOPURA OF TEMPLE.</p> <p>Presence of natural settings - visual identity.</p> <p>Presence of traditional and old mutts.</p>	<p>weakly defined existing node at agnitheertham road.</p> <p>Most of the mutt buildings enclosing the street are not distinct and commercialised difficult to recognized by their shape, form or color.</p> <p>Lack of maintainance of ghat.</p> <p>Absence of open - transitional spaces other than ghat.</p> <p>limited land area for extention due to intervention area falls under CRZ.</p>	<p>Oppurtunity to create an unforgettable impression of space providing visual identity and redesigning the node which would act as an landmark.</p>	<p>Fragile Bio -regions prone to disaster and natural calamities.</p>
ENCLOSURE	<p>The building heights vary from a single story to two stories.</p> <p>The ratio of street width to building height varies from 1:1 to 1:3 creating an almost full to moderate enclosure there by avoiding long sight lines on the street.</p>	<p>Many type of activities occur in the street, thus the movement becomes chaotic.</p> <p>The buildings start directly from the street, forming an edge, and continuity exists in the builtform creating visual intrusion and lack of space for informal activites.</p>	<p>to provide new design guidelines and setback standards for buildings abutting main streets.</p> <p>Oppurtunity to redesign building facades to provide multipurpose space for informal activities and shelter for protection from sun and rain for homeless people.</p>	
HUMAN SCALE	<p>prominent feature - Building width and heights are in proportion and in relation to humanscale.</p> <p>The presence of vendors also enhances the character of the street.</p>	<p>absence of pedestrian path, street elements for human activities.</p>	<p>Introduction of pedestrian friendly streets, street elements and interactive spaces for locals as well as pilgrims.</p>	
TRANSPARENCY	<p>built space along the street majority consists of commercial activities as it comprises active uses with open merchandise displayed on the threshold of the shops, there by actively engaging the pedestrians.</p> <p>strong communication among shop keepers, pilgrims, redents, and tourists can be observed not only on the street but also beyond. The active frontage enhances natural surveillance, there by making the street safe notonly for residents but also for pilgrims.</p>			
LEGIBILITY		<p>Absence of hirarchy of streets.</p> <p>Lack of street management and alternate connective streets in the pilgrimage dominating areas.</p>	<p>Oppurtunity to improve the legibility of the place by street network which provides pedestrian a sense of orientation and provide an alternative shortcut path for local peoples.</p>	





ZONE -1
(i) no new construction shall be permitted in agritheertham edge except,
(a) pipelines, conveying systems including transmission lines
(b) installation of weather radar for monitoring of cyclones movement and prediction by Indian Meteorological Department.
(c) construction of trans harbour sea link and without affecting the tidal flow of water, between LTL and HFL.

ZONE -2
In this zone activities are permitted with certain regulations and necessary safety measures will be incorporated while permitting construction of , public rainshelter, community toilets, bridges, roads, jetties, watersupply, drainage, sewerage which are required for traditional inhabitants living within the biosphere reserves.
It was off-limits for adventurous tourism activities and infrastructure development, except for defence, strategic and public utility projects.



ACTIVITY MAPPING -MORNING



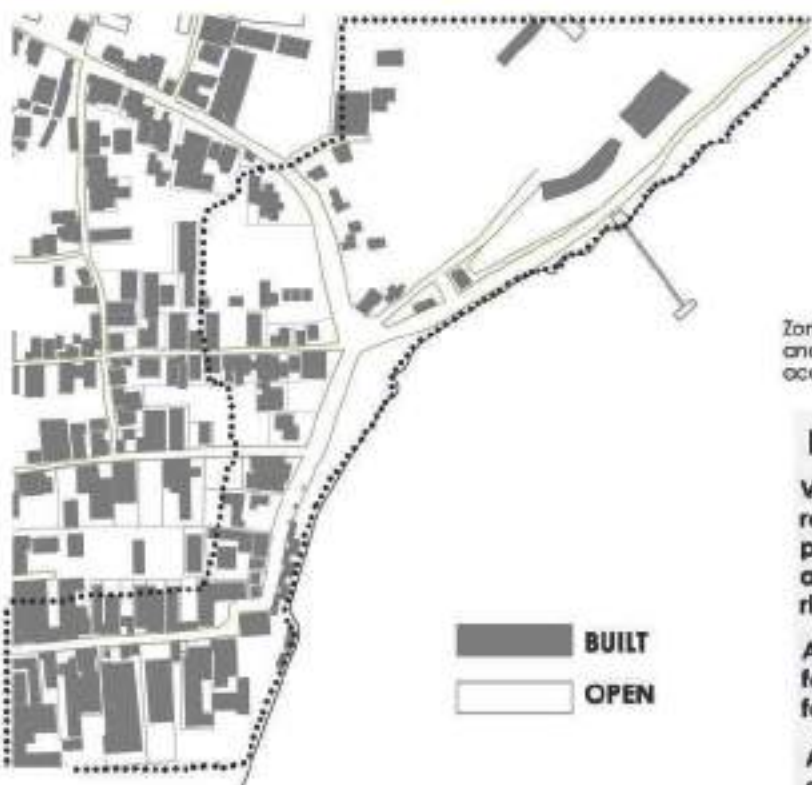
ACTIVITY MAPPING -AFTERNOON



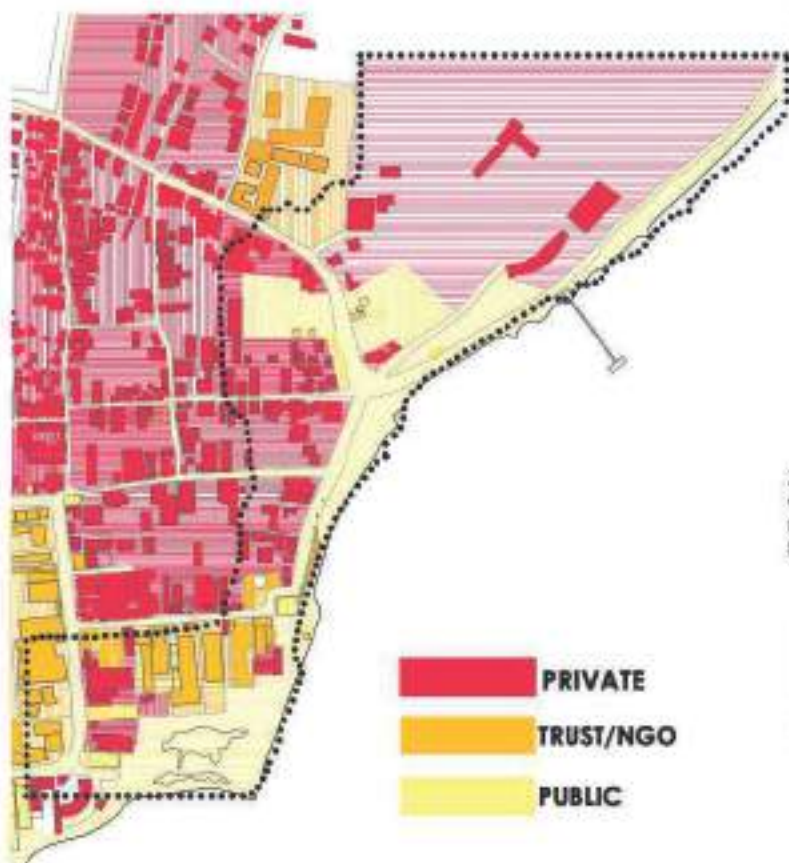
ACTIVITY MAPPING -NIGHT

ACTIVITY MAPPING
the agnitheertham node and temple precinct roads are over crowded by ritual activities pilgrims, local people, vehicles street vendors and cows donated as a part of rituals, parked vehicles in the morning.
In the noon though slight decrease in the ritual activities, infomal activities like coconut tender vehicle, mobile canteen service also taxi services for tourists accomodate in the Node and street.
During night one can see the homeless people and pilgrims from various places sleeping the streets of Temple precinct. The fishing vehicles from the fishing villages such as Volikuda has to cross this node to reach main harbour and fish market since this is the only connecting street from regional area.
Maximum influx of population during peak time causes disturbance in the spatial distribution of the street and surrounding spaces of Agnitheertham edge

INFERENCE : ANALYSIS OF BUILT VS OPEN AND LAND OWNERSHIP PATTERN.



INFERENCE :
Very important spatial challenge is to reappropriate the node and street pattern without disturbing the existing activities such as vending activities, ritual activities, pilgrims movements etc.
Another challenge is limited land area for extention due to intervention area falls under CRZ.
Available open spaces acts as an opportunity to induce public utility infrastructures.



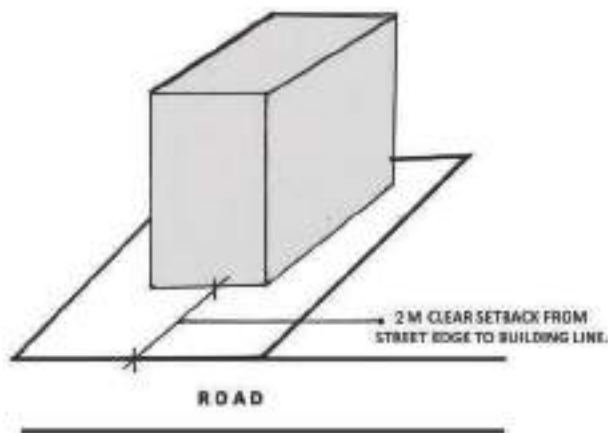
It is necessary to design a spaces with canopies which acts as a multipurpose space works for throughout day and night.

EXISTING STREET WIDTH CONDITIONS.

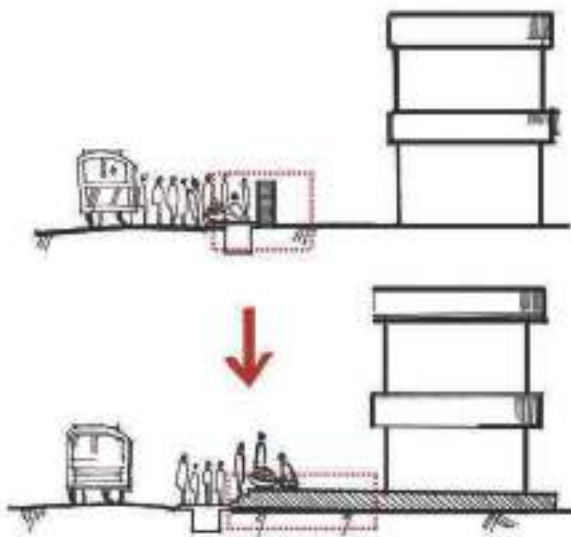


SETBACK CONTROL REGULATIONS AND GUIDELINES.

1. ALL THE CAR STREETS AROUND RAMANATHASWAMY TEMPLE AND NEW DEVELOPING STREETS IN THE TEMPLE PRECINCT SHOULD LEAVE A CLEAR FRONTYARD SETBACK OF 2 METER FROM THE BUILDING LINE TO ROAD LINE.



2. RESTRICTING THE SOLID BOUNDARY WALL OF COMMERCIAL BUILTUPS WHICH ARE ABUTTING THE MAIN ROADS OF RAMESHWARAM INSTEAD DESIGNING A PLATFORM WHICH PROVIDES AN INFORMAL ACTIVITY SPACES.

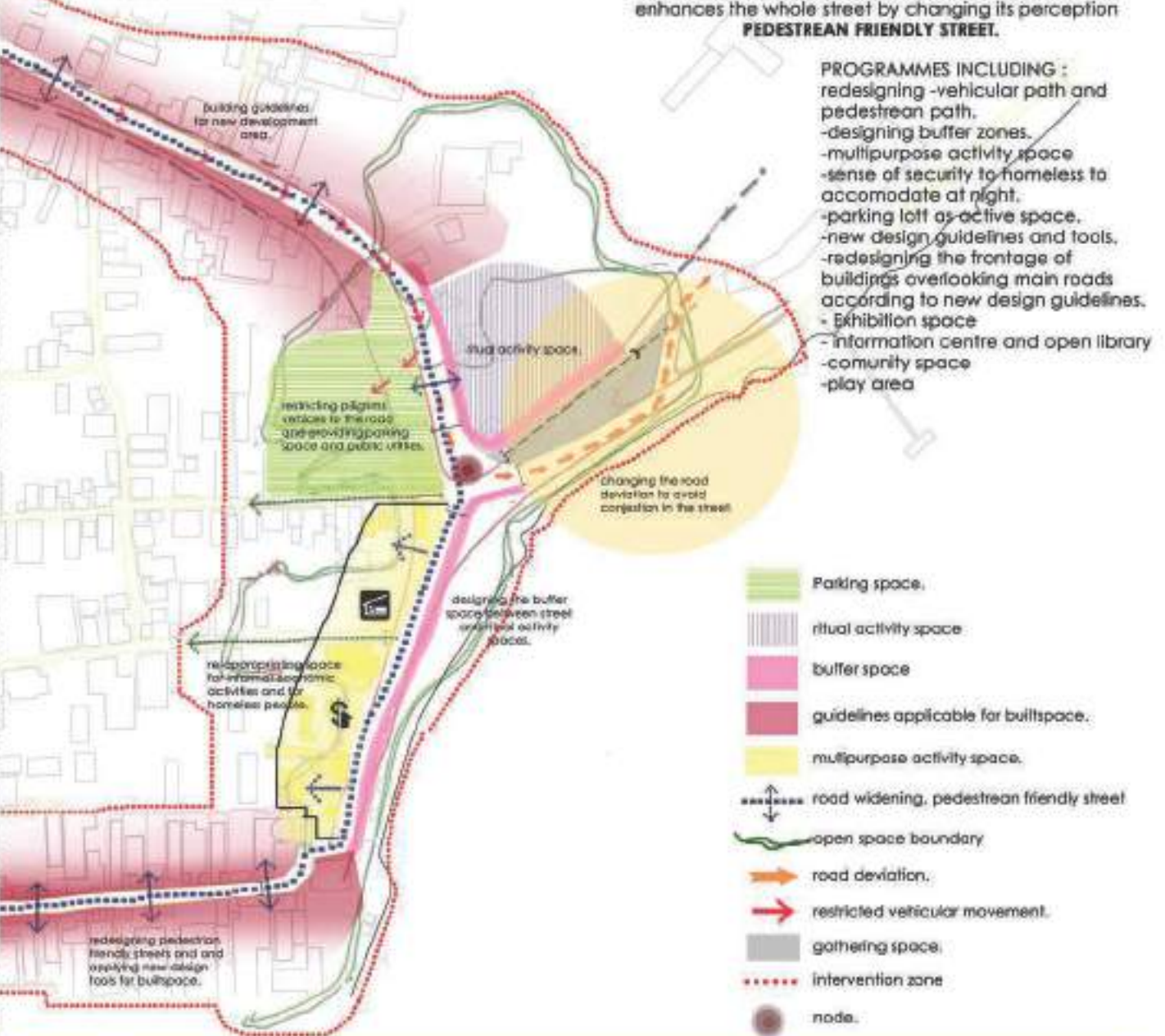


INTRODUCTION OF NEW POLICIES :

Soft pedestrian-friendly policies such as:

1. Removal of the parking entirely in phases.
2. Introducing the sidewalks and reducing vehicular lanes simultaneously.
3. Making the road one way eventually reducing vehicular movement.
4. Establish and enforce timings for loading and unloading of service vehicles preferably during less traffic volume time.
5. Alloting new parking space for tourist and pilgrim vehicles including taxis and local rikshas and restricting their entries in the temple precinct streets.
6. Introducing new pedestrian paths.
7. Installing retractable bollards for restricting vehicles.

IMPLEMENTATION FRAMEWORK.



ADAPTIVE STREET CONCEPT.

Streets are public spaces that can support a multitude of activity and function not only movement of vehicles, pedestrians, but also places to gather, socialize, stay and play.

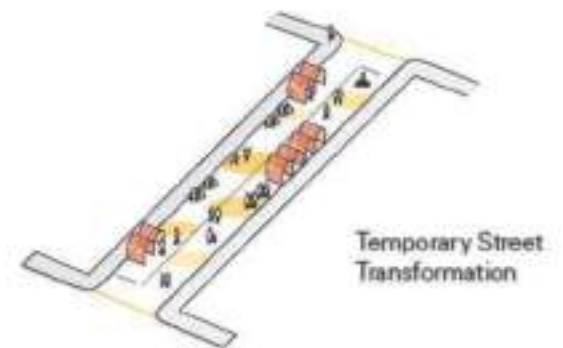


PARKLET
Parklets transform parking spaces into small spaces people to use and enjoy. They provide pedestrian amenities such as seating landscaping etc.



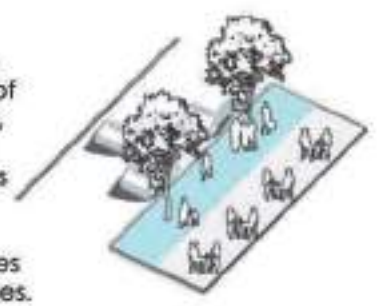
TEMPORARY STREET TRANSFORMATION

By opening a street to pedestrians and limiting through traffic, streets can support physical activity, social interaction and play and can strengthen community as well as pilgrims activities informal economic activity, local craft exhibitions, markets and festival streets are examples of street uses that transform streets on a recurring basis.



SIDEWALK EXTENSION

Wider sidewalks can improve the pedestrian's experience of the city. In commercial areas, wider sidewalks can provide room for street furniture, trees and landscaping. Sidewalk extensions can also work to accommodate higher volumes of pedestrians waiting for buses.



TRIANGLE PLAZA

A triangle plaza repurposes an oversized portion/node of the right-of-way that is frequently found when there is a break in the grid and streets cross at oblique angles. A portion of the street can often be closed and connected to leftover space 'islands' to create a new public space.





SECTIONAL ELEVATION -BB1

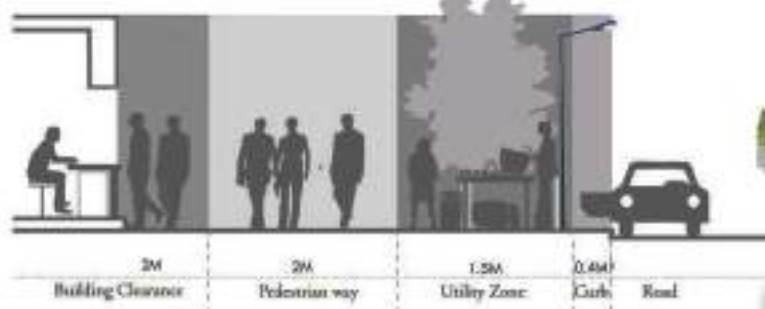
ALONG WITH THE PILGRIMS RAMESHWARAM ALSO ATTRACTS TOURISTS. DESIGNING AN ACTIVITY AREA WHICH INCLUDES LIBRARY AND INFORMATION CENTRE TO GUIDE TOURISTS, PLAY AREA, FOOD COURT AND COMMUNITY SPACE FOR INTERACTIONS.

AREA OF INTERVENTION



To create a multiplicity and simultaneity design which enhances the whole street by changing its perception
PEDESTRIAN FRIENDLY STREET.

- PROGRAMMES INCLUDING :**
- redesigning -vehicular path and pedestrian path.
 - designing buffer zones.
 - multipurpose activity space
 - sense of security to homeless to accommodate at night.
 - parking lot as active space.
 - new design guidelines and tools.
 - Exhibition space
 - Information centre and open library.
 - community space
 - play area



STREET STANDARD -SECTION -AA1



REDESIGNING STREETS AS PEDESTRIAN FRIENDLY STREETS



SECTIONAL ELEVATION -CC1

DESIGNING AN EXHIBITING AREA / DISPLAY AREA TO SHOWCASE THE LOCAL CRAFT WORKS AND PHOTOGRAPHY OF THE PLACES OF RAMESHWARAM WHICH CREATES AN ECONOMIC OPPURTUNITY AS WELL AS PLATFORM TO EXHIBIT SKILLS.

REDESIGNING THE GHAT EDGES AS AN MULTIFUNCTIONAL SPACE. SPACE FOR THE RITUAL ACTIVITES DURING MORNING AND SHELTER FOR THE HOMELESS PEOPLE IN THE NIGHT



SECTIONAL ELEVATION -DD1



RAMESHWARAM

DESIGN PROPOSAL



DOCUMENTATION OF THEERTHAM

THEERTHAM : NARNA THEERTHAM DOCUMENTATION



NARNA THEERTHAM LOCATED IN THE VOLIKUDA VILLAGE, MAJORLY OCCUPIED BY FISHING COMMUNITY. DISCONNECTION OF THE OLD PILGRIM PATH AND LACK OF MAINTAINANCE, THEERTHAM DOES NOT REMAINED AS SACRED. RESIDENCES AROUND THIS THEERTHAM USES THEERTHAM WATER FOR DOMESTIC PURPOSE INCLUDING WASHING CLOTHES AND VESSELS. "GREEN RAMESHWARAM" HAS TAKEN INITIATIVE TO CONSTRUCT COMPOUND WALL AROUND THEM TO PROTECT IT.



NARNA THEERTHAM VIEW



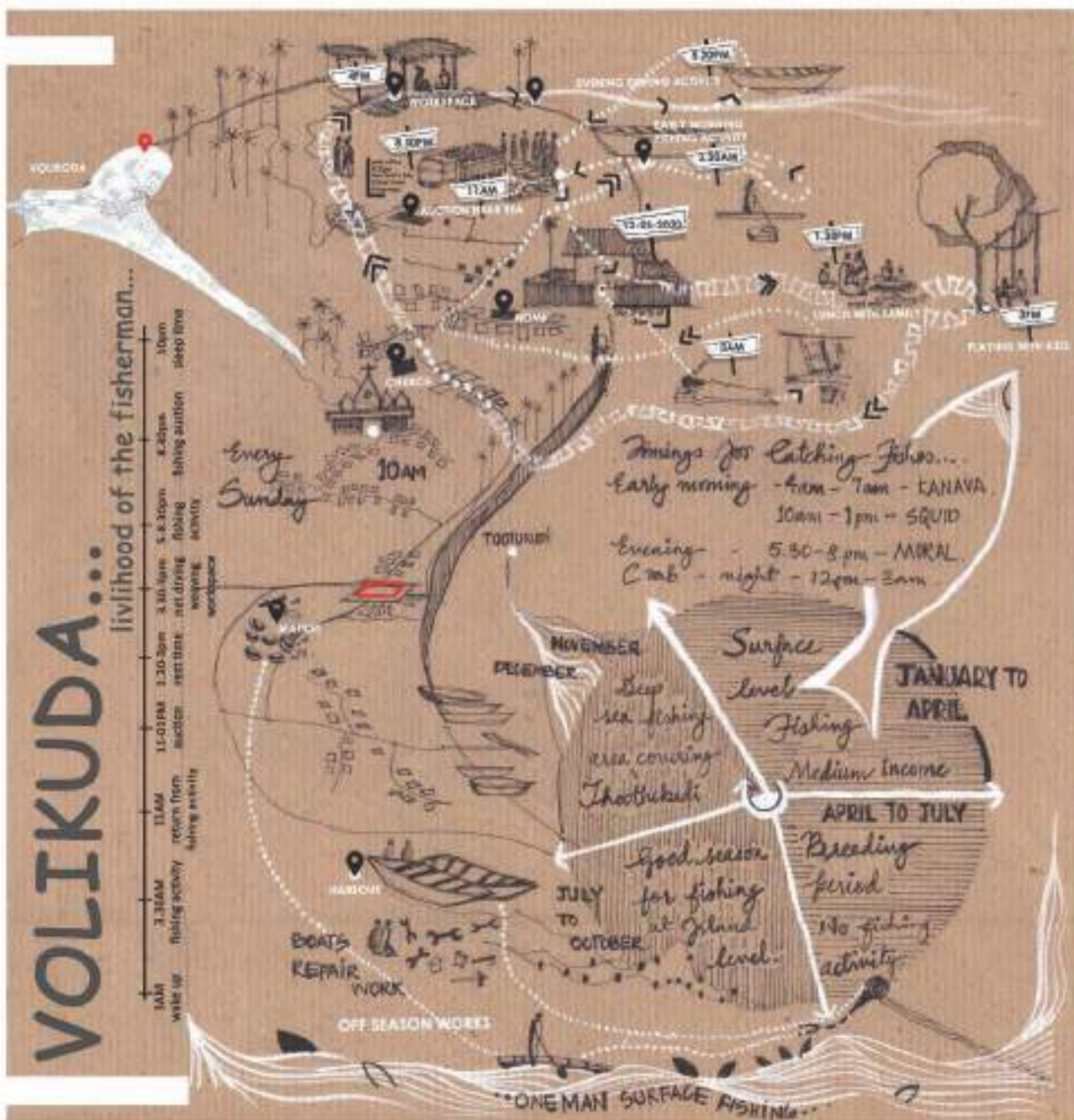
HOUSING TYPOLOGY



STATUE OF MOTHER MARY

STREET EDGES

STAKEHOLDER STUDY :



STAKEHOLDER : FISHERMAN OF OLAIKUDA REGION



NAME : YESUDAS
AGE : 42 yrs
OCCUPATION : fishing

Yesudas belongs to CHRISTIAN community, lives in Volikuda fishing village, his whole family depends on fishing activities. He is the third generation of his family who involved in fishing occupation.

INCOME : normal days : 90 to 150rs/day during season : 800 to 1300/day

FESTIVAL : CHRISTMAS - community festival. KATCHATEEVU - fishermen of Rameshwaram celebrates.

FOOD STYLE : Rice and Rason along with fish.

FAMILY : Father works as a watchmen in restaurant of Rameshwaram. Wife helps in his fishing activities and he has 3 kids.

OCCUPATION : Yesudas goes to early morning fishing activity every alternate days and other day he will be involved in catching SQUIDS in the surface water. Fishing activities are mainly depends on the natural lighting techniques, few fishes like to float on the surface of the water due to the sunlight and moonlight, based on that timing fishermen catches the fish. During breeding time fishermen involved themselves in boat repairing works and net wearing works.

ISSUES : Major issue faced by this fishermen are connectivity to main fishmarket. Since the only one road available to connect main harbour and market from Volikuda which is majorly covered by sanddunes, fisherman faces challenge in transporting fishes. These fishermen houses lacks basic facilities including water supply and sanitation.



CHURCH



RESIDENCE



FORMATIVE PERIOD

During this period many pilgrims traveled bare footed from across the various regions of India mainly from north part and used to stay for long time till their pilgrimage is done. In 700AD Adi Shankaracharya traveled to Rameshwaram as a part of teaching the principles of Advaita. The existing Theerthams in the island were created by pilgrims which catered for their livelihood and the pilgrims used to stay around it. Theerthams were named on the characters in Ramayana.

PRE COLONIAL PERIOD

URBAN DESIGN STUDIO

Batch 2019-20 2nd Sem M.Arch

During this period regional rulers donated few lands, villages and dharmashalas around Rameshwaram to accommodate pilgrims who travel from other regions. Temple prakarams, Devasthanam houses were also constructed to accommodate pilgrims.

- Cultural markers
- Settlements
- Dharmashalas
- Theerthams

- Cultural markers
- Devasthanam Houses
- Settlements
- Dharmashalas
- Theerthams
- Pandas Houses/ Mutts



COLONIAL PERIOD

Introduction of railways increased the influx of pilgrims to Rameshwaram. Many Chattrams were built to accommodate pilgrims, out of which Tanjore Rajah Choultry, Ramanad Rajah Choultry and Venkata Rao Choultry were the big Chattrams and would cater to large number of people. Those who doesn't wish to stay in Chattrams had an opportunity to stay in Devasthanam houses or in the panda house. Thriupanni buildings were built to accommodate temple construction workers. Temple management buildings were built on the east street to accommodate trustees.

POST COLONIAL PERIOD

Dhanushkodi suffered from Cyclone in 1964, which destroyed the complete town. So all the infrastructures and the settlements were shifted to Rameshwaram. A new railway line was constructed in Rameshwaram. Many people migrated from other cities and settled here because of the new development happening in the city. Many commercial activities started along the middle street. Old mutt/residential buildings were converted to commercial shops/hotels. The city grew towards SW side because of the movement of pilgrims from railway station to temple.

- Theerthams
- Cultural markers
- Devasthanam Houses
- Thriupanni buildings
- Temple buildings
- Chattrams
- Chank stores
- Pandas Houses/ Mutts
- Chattrams
- Railway Station
- Hospital
- Settlements

- Theerthams
- Cultural markers
- Devasthanam Houses
- Thriupanni buildings
- Temple buildings
- Chattrams
- Chank stores
- Pandas Houses/ Mutts
- Chattrams
- Railway Station
- Settlements



HOW SOCIAL INFRASTRUCTURES AND ECONOMICAL FORCES WEAVE THEIR NETWORK WITH PILGRIMS?

