



WHS_ Bhimbetka cave dwellings 100,000 years old;
M.P.(discovered: 1970) pic: Walter

Cultural Resource Dynamics for Climate Action for UIA Work Programme Heritage and Cultural Identity

4th August 2022

Presentation By

Poonam Verma Mascarenhas

Architect . Heritage Building & Urban Conservation Specialist . Research Writer

Acknowledgements:

Team members:

@ RUIDP, IDIPT, HECAR and archinova_ environs

“Projects are Team Work
Perspectives are mine.”

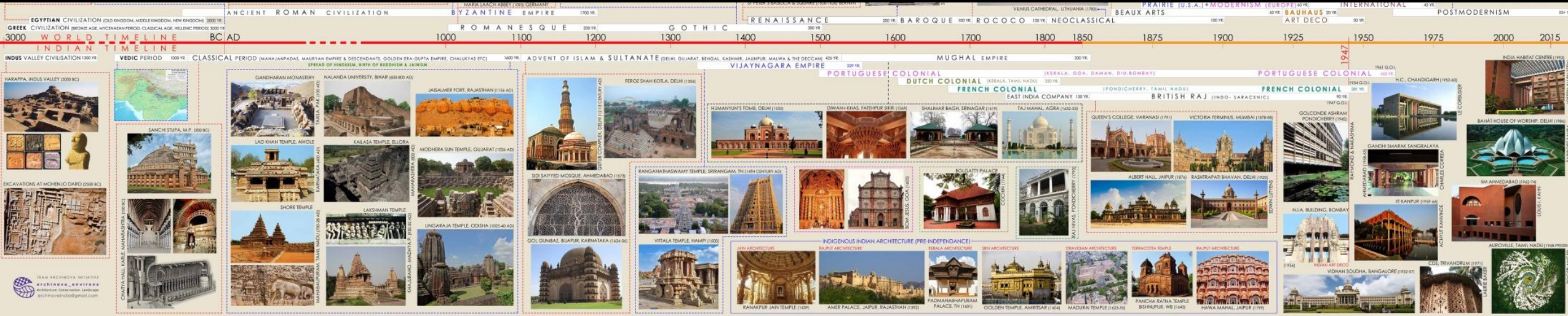
Pic credit and content: author, unless -otherwise mentioned

The two streams – *Conservation* and *Sustainability*
have had same foot hold in the present, of us as **custodians**
to ensure **caretaking of resources** and not robbing the next generation of its availability.

Culture is considered as the 4th pillar of sustainable development;
however, I believe,
it can be the **integrator** connecting the other pillars of:
economic growth,
social inclusion
and environmental protection
in distributing the weight of **Sustainability**.

‘CULTURE’ is a **process**, wherein the first step is:
a new **pattern of behaviour** is invented or an existing one is **modified**.

Cultural Resources of India are 3000 years of process of innovation, assimilation, appropriation, adaptation, adoption, & fusion



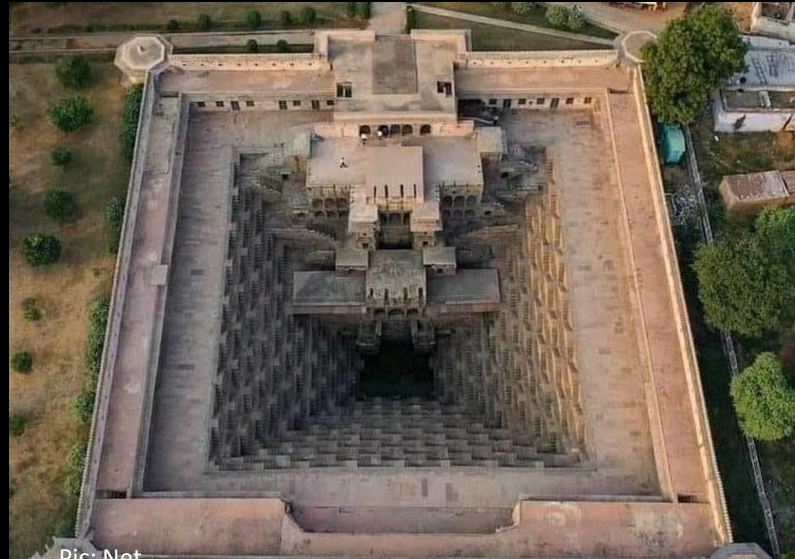
The 3000 years of living culture and recorded history is testimony of **humans to be most adaptable** and are the key to managing the **finite resources** of the planet.

Pandemic years have shown:
capacity to overcome adversity needs both: **abilities** and **adaptability** of humans

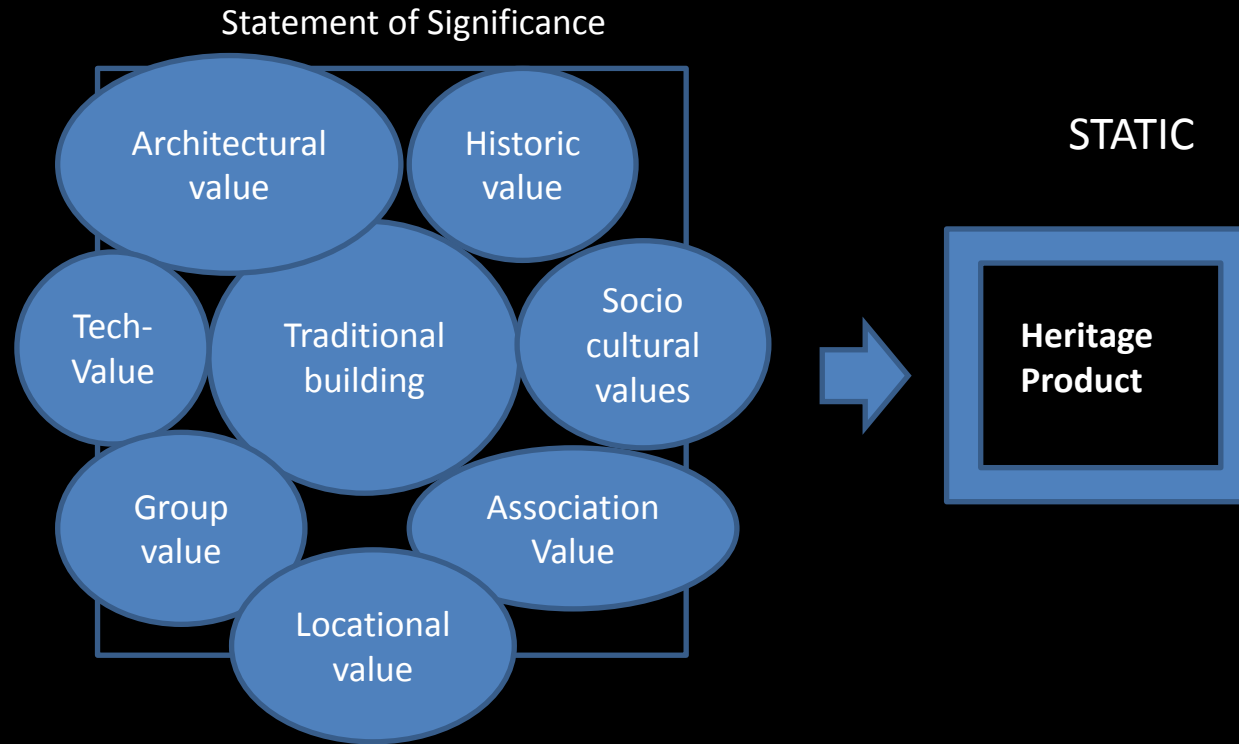
Traditional Building Materials:

Stone, Earth, Lime for mortar, plaster, decorations. **and Wood** for floors, doors, windows, columns, roofs.

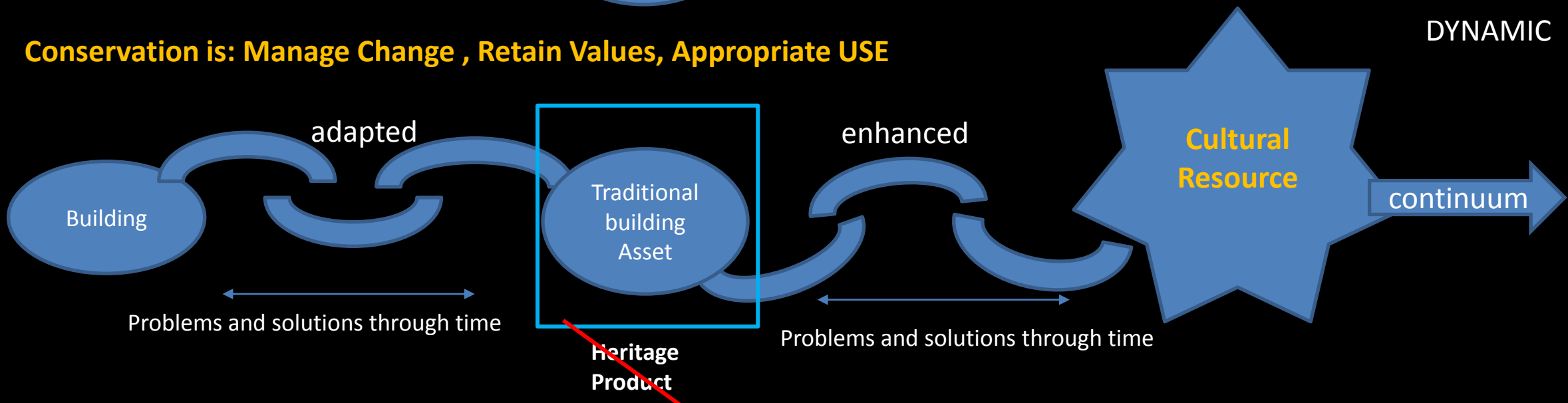
TRADITIONALLY= CLIMATE + TERRAIN + Management of RESOURCES = **distinctive Regional DESIGN**



Popular Perception of Conservation Is PRESERVATION



Conservation is: Manage Change , Retain Values, Appropriate USE





Structure of Presentation : Experiential Learning through Action

Government Funded Projects (RUIDP-2001-2004) (IDIPT, H.P. 2016-2020)

Nature Culture Projects

Revival of Stepped well and Reservoirs, Amber (RUIDP-2001-2004)

Fort Wall and Historic Gates Amber (RUIDP-2001-2004)

Urban Conservation : Jaipur - City Gates (RUIDP-2001-2004)

Building Level (IDIPT, H.P. 2016-2020)

Rehabilitation and Reuse of Town Hall, Shimla

Restoration and Reuse of Bijay High School Old Building, Mandi

Privately Funded Projects (archinova_environs 2005 onwards)

Conservation, Addition & Alteration at Palacial- Golcha Garden, Jaipur

Cultural belief system as Conservation Instrument at COORG (HECAR)

Conservation, Addition & Alteration of Goan House, Saligaon

Conservation, Addition & Alteration of Goan House, Parra

As a Citizen: Initiatives and Participation

Participation in Regional Plan -Goa

Heritage Custodians in Panaji, Goa

Conclusion: Proposal for Paradigm shift:

Values and Development-oriented Conservation and vice-versa

Amber: Conservation Planning and designing with nature

Revival of Stepped well and Reservoirs, Amber (RUIDP-2001-2004)

Upper Sagar

Dam Wall with pavilions and rooms

PIC Credit: Rashmi Singh_2018

Lower Sagar

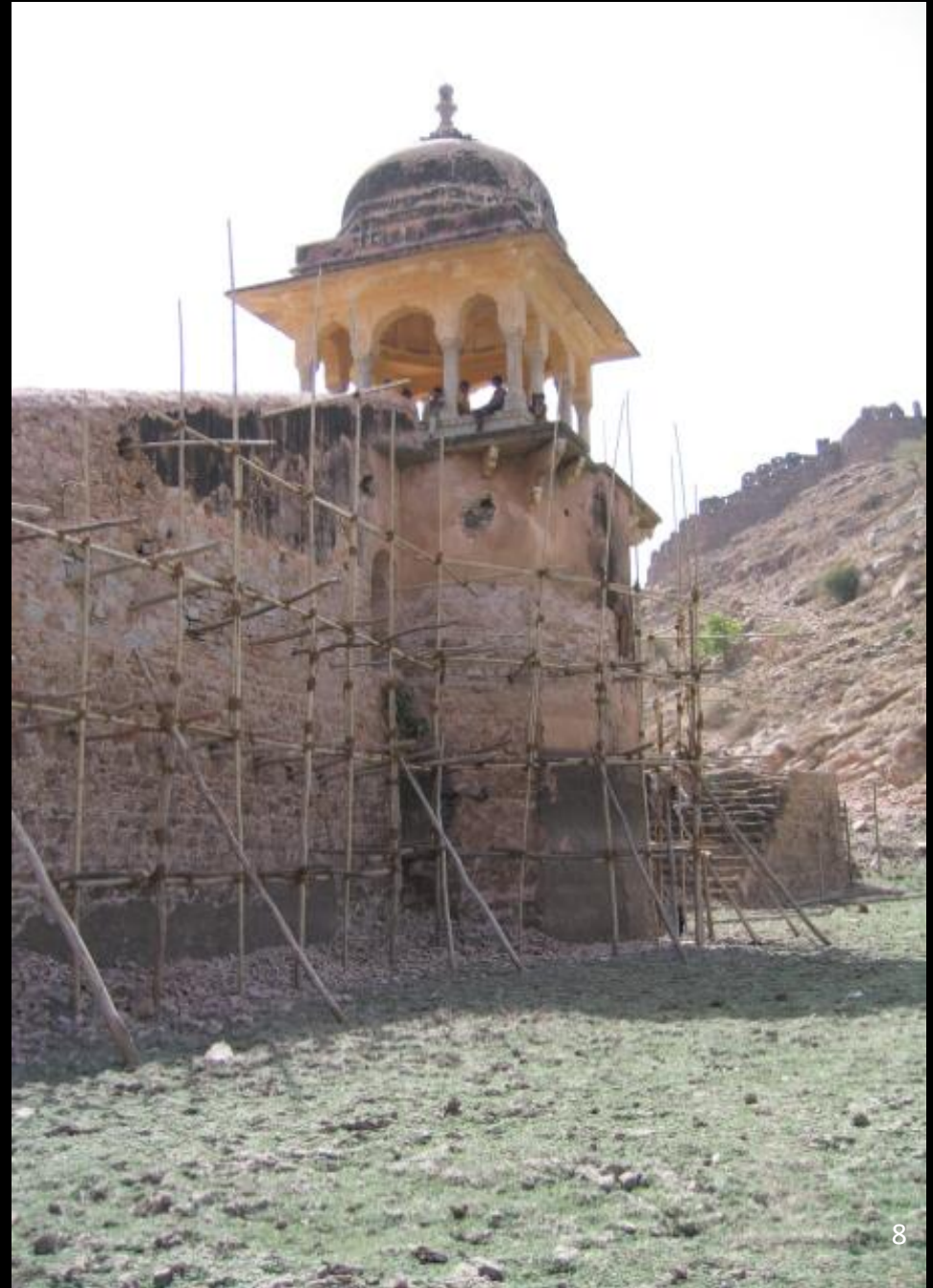
PIC Credit: Ashish Aggarwal_2002

RESTORED AMBER FORT WALL

Seven km long Outer Fort Wall of Amber is now restored (by SDoA) using our proposal and is now open to public for adventure-walks is a sight to behold. Simple sentiment that if they could build it in 12th C - surely we can repair and maintain it in 21st C gave the impetus!

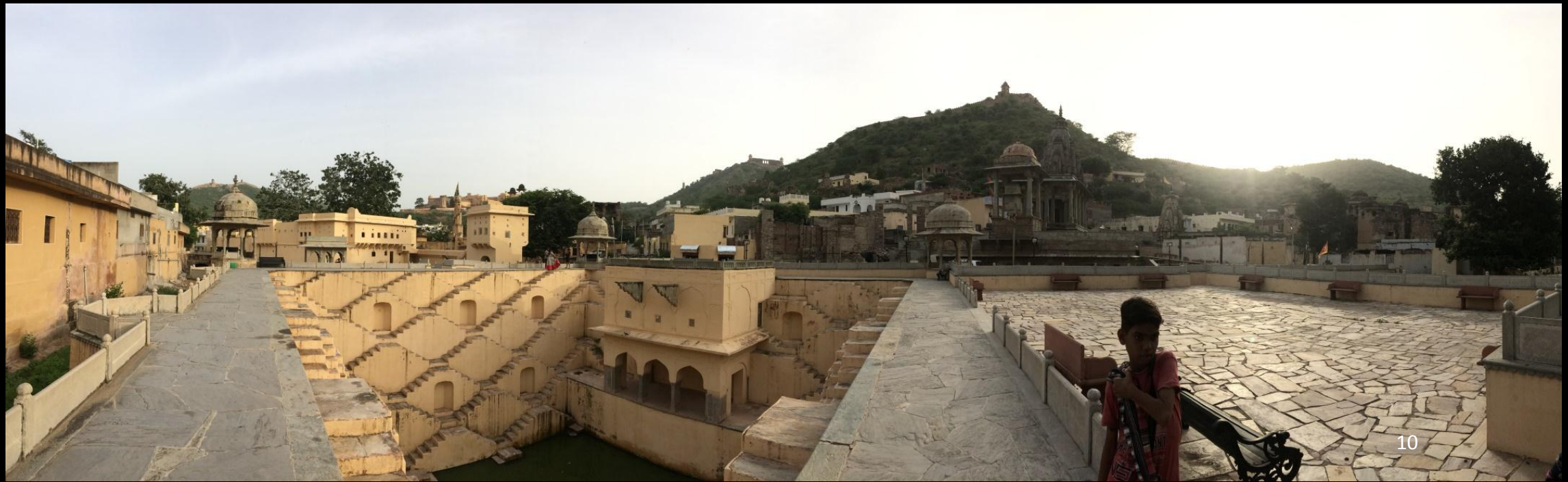
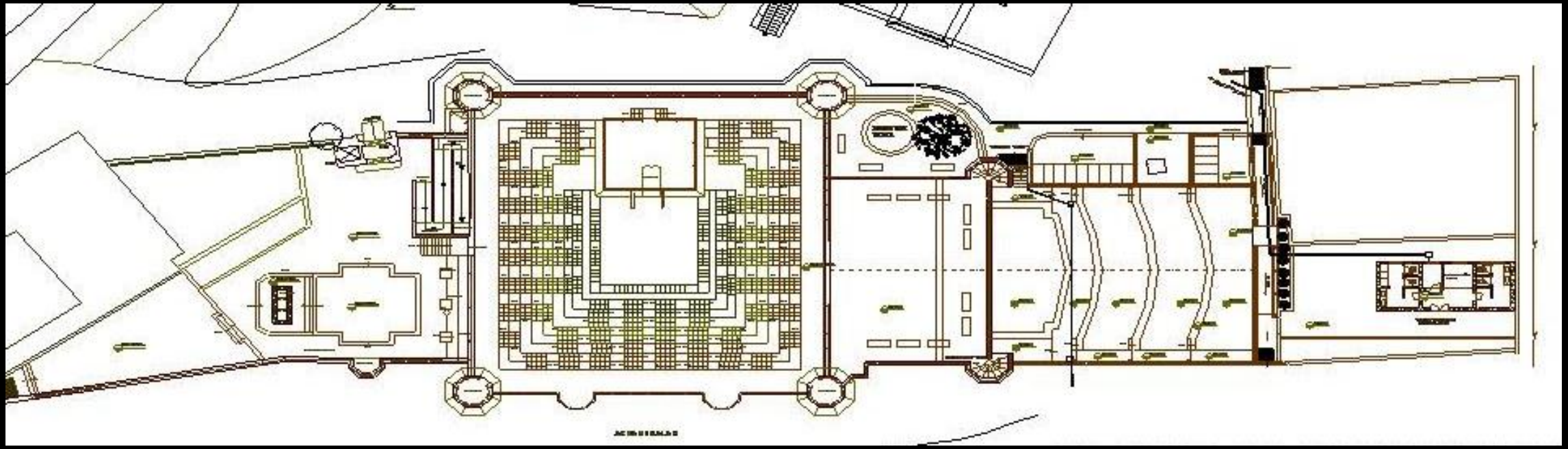


View of Sagar from the top

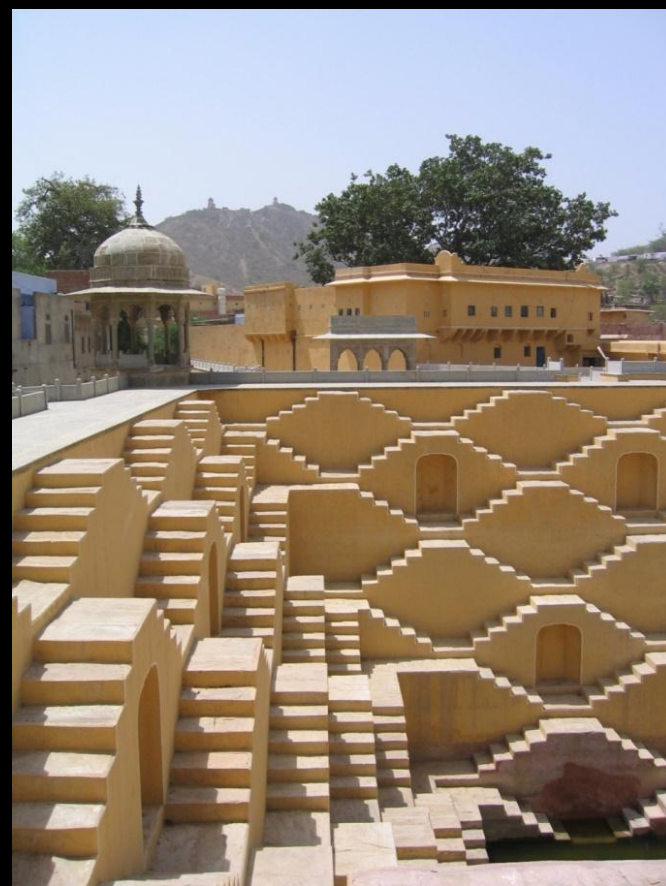
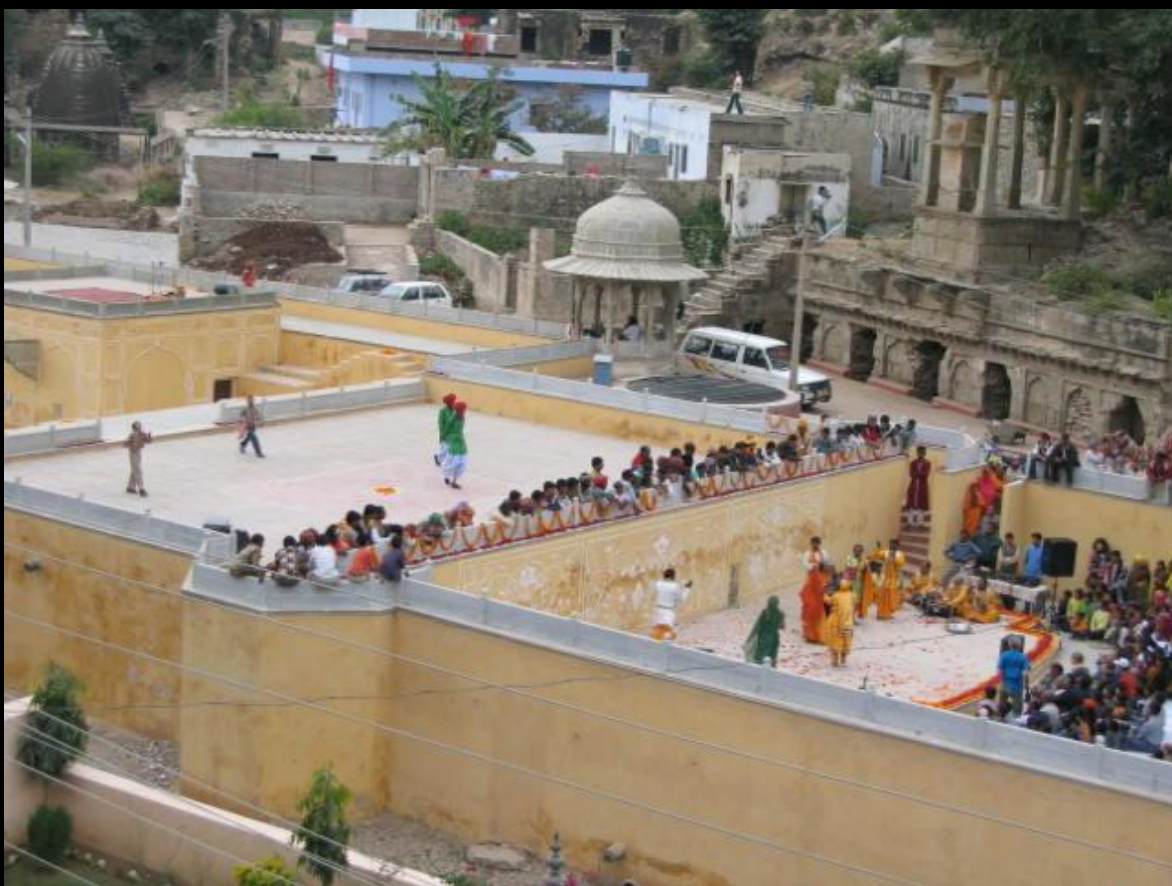


Conservation and Development of Panna Miya/ Meena Ka Kund :
Dismantling and Rebuilding of Open Pavilion (the Original Prefab Construction Technology)





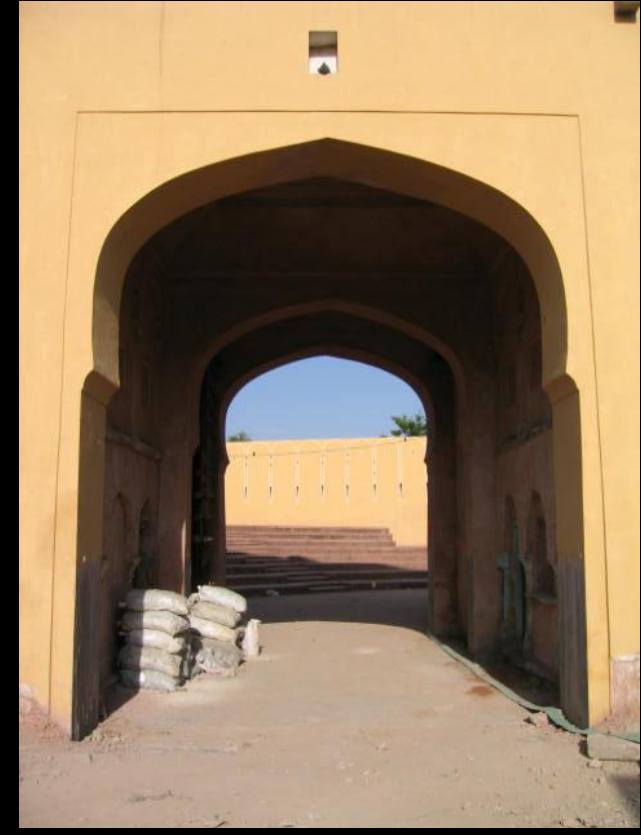
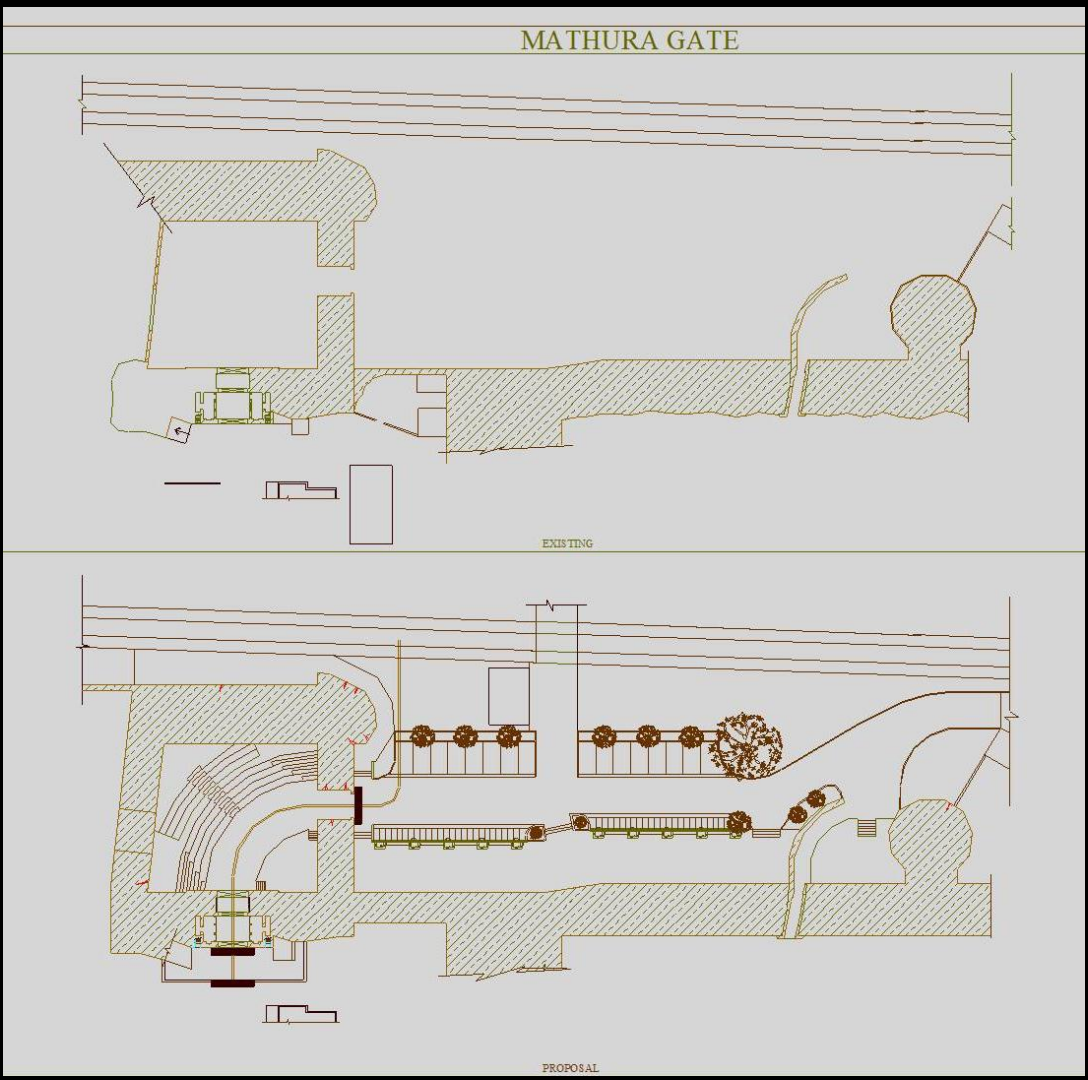
Nature –Culture Project: Conservation and Development of Panna Miya/ Meena Ka Kund

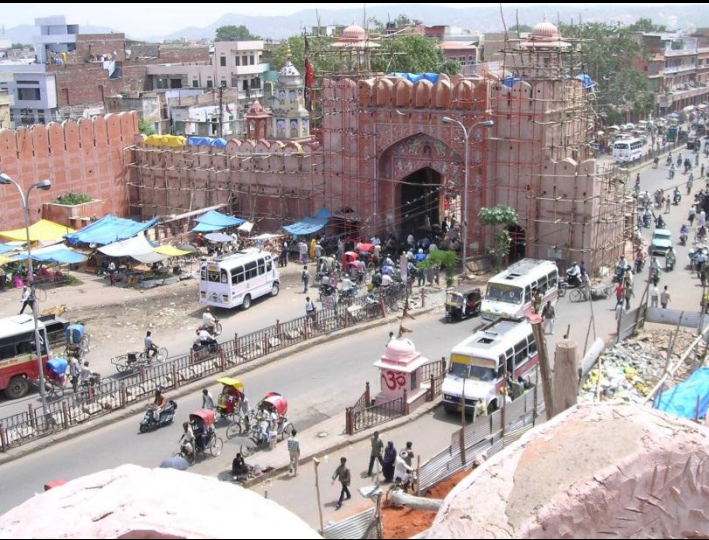


PERI-URBAN CONSERVATION & Area Development –AMBER :

To check encroachments
DESIGN for NEW USE

Mathura Gate Amber



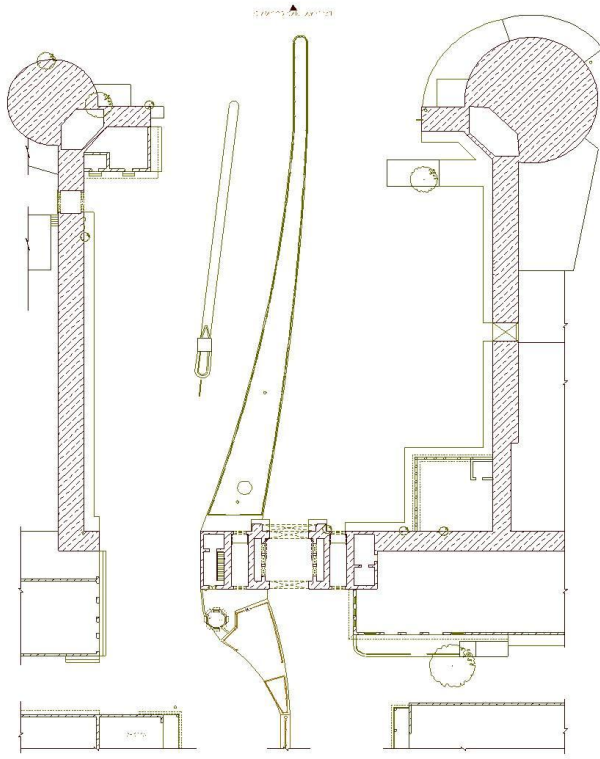


URBAN CONSERVATION
& Area Development –JAIPUR :

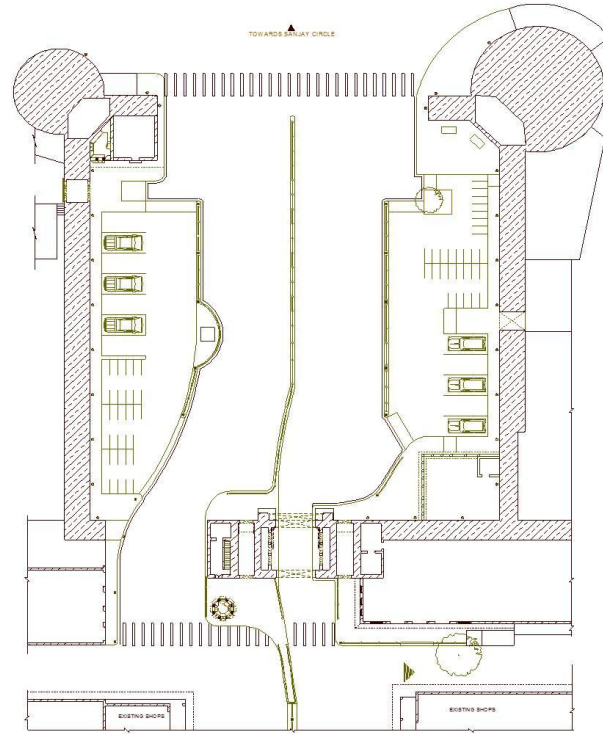
Don't Remove The Users
DESIGN FOR THEM

Conservation and Area
Development at Chandpol Gate

CHANDPOL GATE



EXISTING



PROPOSAL



Pedestrian Archway Created in Old Fabric at
New Gate, Jaipur



EXISTING

Ajmeri Gate – Conservation and Area development



PROPOSED

URBAN CONSERVATION & Area Development –JAIPUR (RUIDP-2001-2004)

Don't Remove The Users ; DESIGN FOR THEM

Conservation and Development of GALTA GATE, Jaipur



Then



Public Services Block appropriate designed -in the historic precinct



BUILDING LEVEL CONSERVATION for REUSE

Rehabilitation of Colonial Heritage: Shimla Town-hall (1908) (IDIPT H.P. 2016-19)



Town Hall Shimla Mall Road Facade



BUILDING LEVEL CONSERVATION for REUSE

Primary Features:

Three separate entrance allow for three USES in the building, with internal connection for management

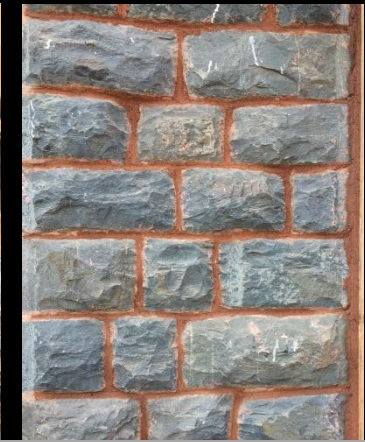
1. Attic: Children's Art School and library
2. First floor (G.F. from Ridge Road) Mayor's Office and related
3. Ground Floor(Mall road Entrance): Cultural Centre, Public amenities, offices

Town Hall Shimla Ridge Road Facade

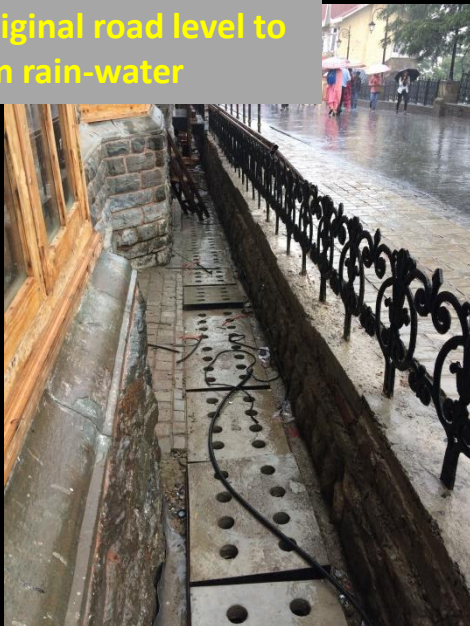


Specifications and Methodology for Traditional works:

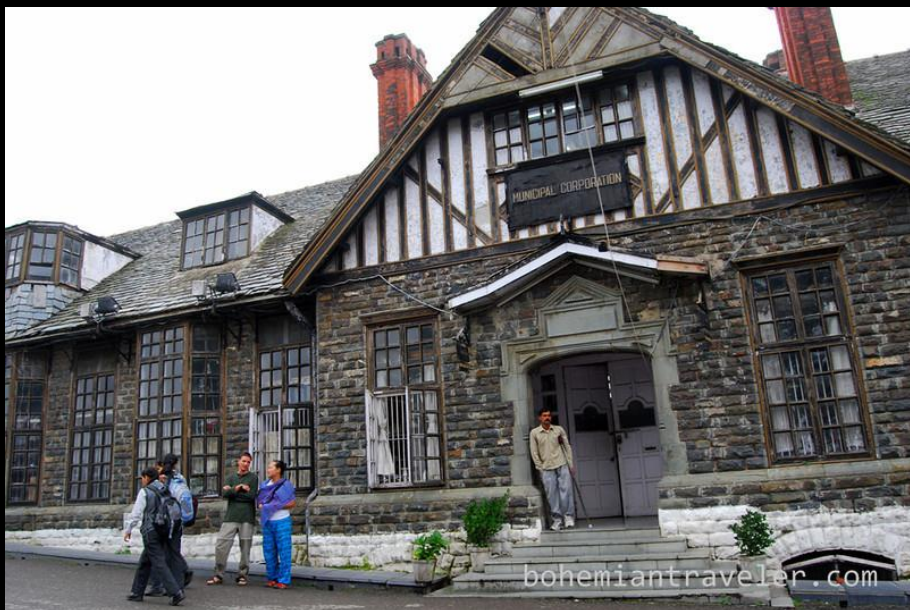
- Conservation of exposed brick chimneys
- Repairs and cleaning of Ashlar stone façade
- In-situ Stone repairs
- Stone slate roofing
- Lime mortars and plasters
- Timber works and finishes in Deodar wood.
- Relaying of slate stone roofing
- Retrofitting of services (smoke alarms and fire-retarder sprinkler system, toilets, internal and external lighting)



Reclaiming drain at original road level to effectively drain rain-water



Man-made
Vulnerabilities



Town Hall Shimla



Man-made
Vulnerabilities



Attic: REUSE proposed: Children's Art Studio and Library



First Floor REUSE: Public Interaction Hall with Mayor



Man-made
Vulnerabilities



Attic: REUSE proposed: Children's Art Studio and Library



First Floor REUSE: Public Interaction Hall with Mayor



Town Hall Shimla
Mall Road Facade



Ground Floor: Entrance & Lobby





Archival

Restoration and Reuse
Bijai High School, Mandi

Established in 1866
The First School of Mandi

ACTIVE DERELICTION
Development that is NOT
conservation oriented



Pics : Prabha Choudhary



Restoration and Reuse
Bijay High School, Mandi (IDIPT 2016-2020)



Pic : Prabha Choudhary



OLD BOYS (Alumni) Association and their **shared memories**
Ensured the renewal

Public Use as Library and Vocationl Centre



Restoration and Reuse : Bijay High School, Mandi

CAPACITY BUILDING AND REVIVAL OF TRADITIONAL PRACTICES

Improved detailing

Enhanced performance

Better Manageability



Restoration and Reuse : Bijay
High School, Mandi





Restoration and Reuse :
Bijay High School, Mandi



Pics : Prabha Choudhary



Palatial Private Property: Golcha Gardens, Jaipur: Multiple Historic Layers (late 17th C onwards) and as many Users & Uses



Project background

Addition of several building layers in last half century.

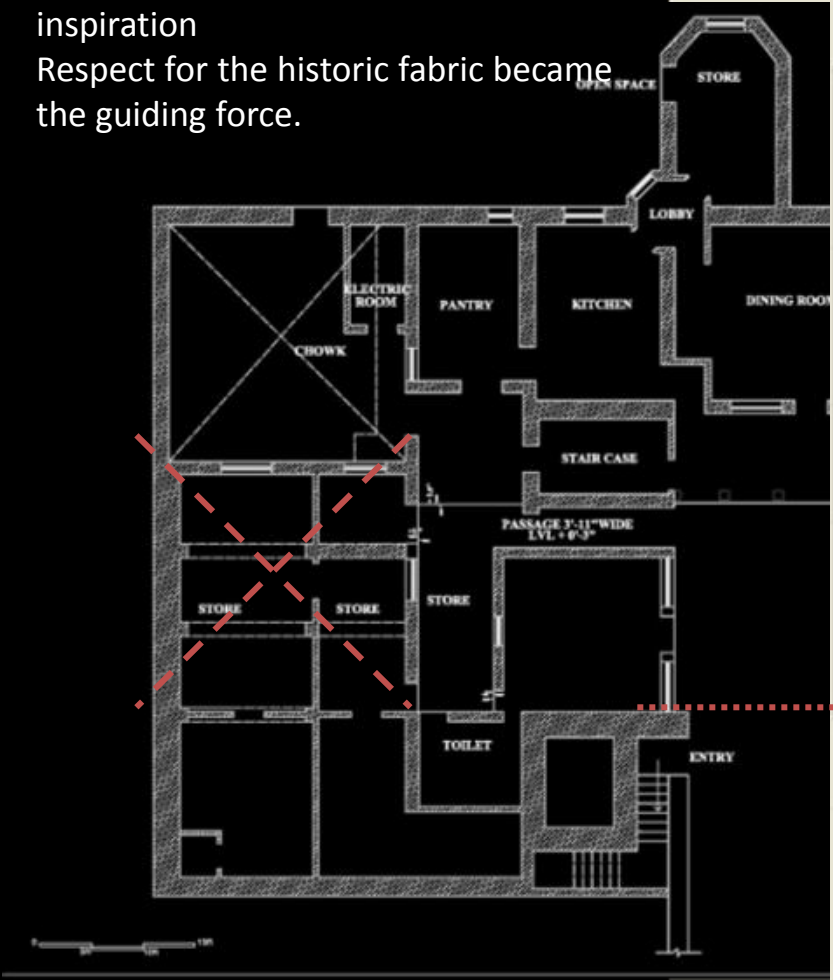
- The art deco façade of the office block
- The two residential wings on the North and South end of the original palace with wide verandahs supported on red sandstone columns.
- The North wing was given a makeover in the 90s :
- Formal living room, dining and refurbished kitchen and master suite to welcome the new bride
- The addition of two children to the family initiated the process of **rationalization of the built fabric** as while there were several rooms but **none were livable due to lack of ventilation and light.**



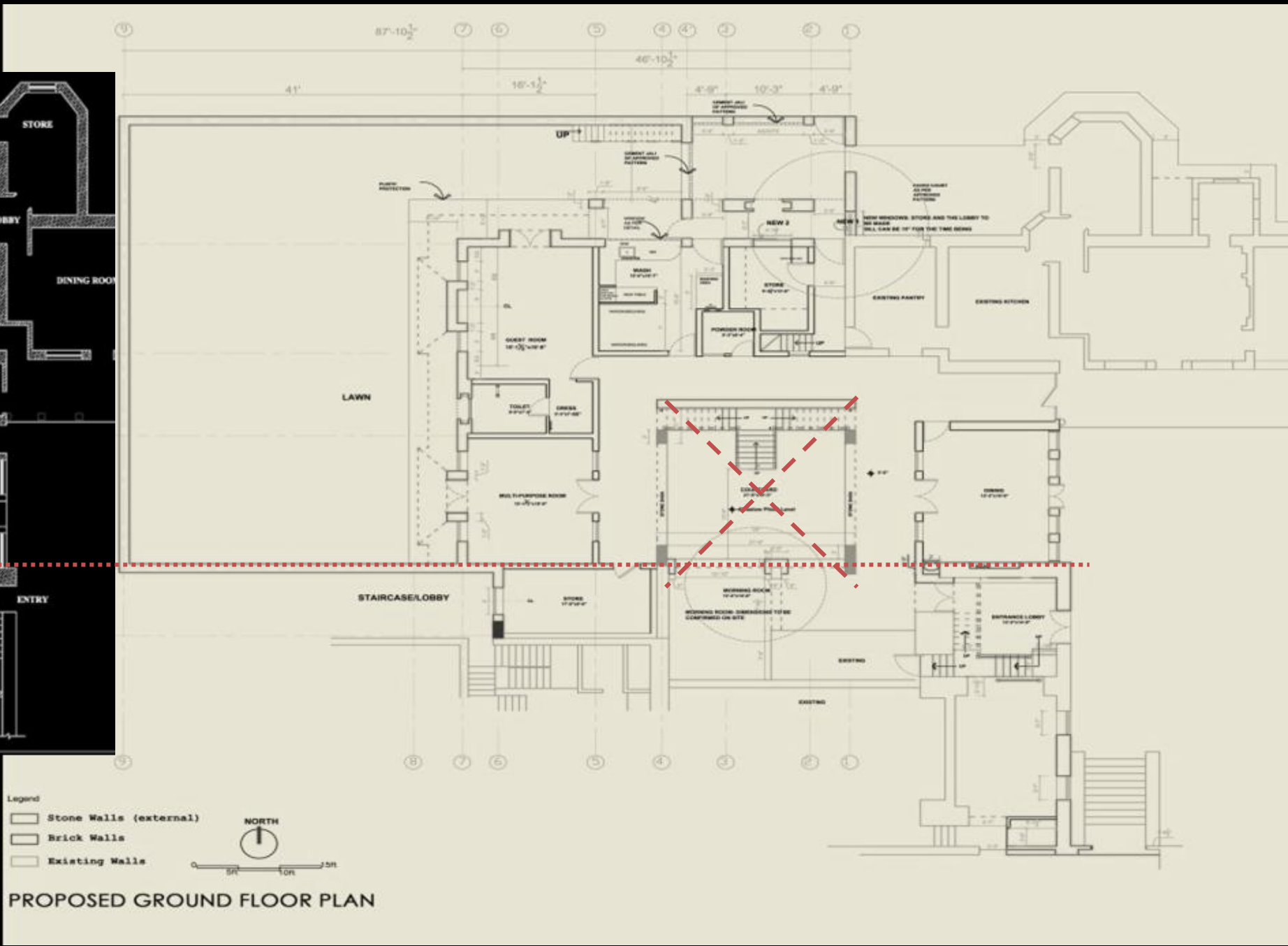
Additions in Historic Building

Design attitude

- Existing Design Elements as inspiration
- Respect for the historic fabric became the guiding force.



COURTYARD



PROPOSED GROUND FLOOR PLAN

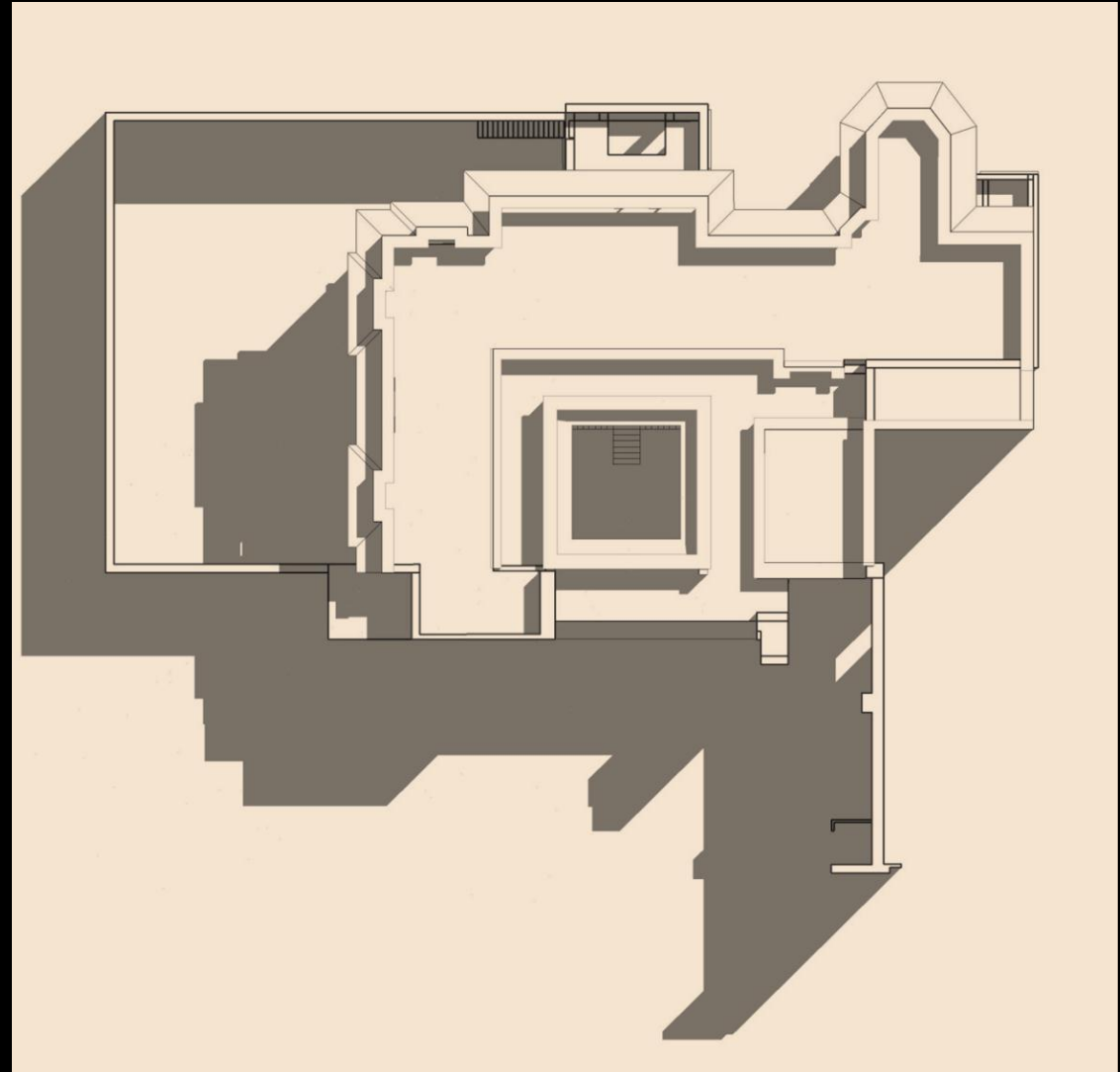
Environmental Sustainability through **Traditional Knowledge System**

1'6" (45cm) thick stone random rubble walls with 1"(25mm) thick lime plaster –ensures **effective mitigation of the thermal heat** retention and transmittance.

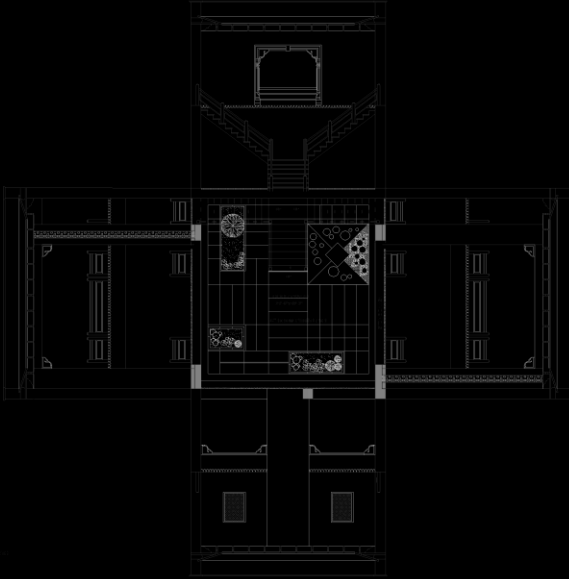
Deep verandahs surround the inner courtyard to **mitigate direct solar gains**.

Detailing of the façade with moldings and *sun-shades* mitigate water runoff on the wall surfaces to **enhance the performance and delay deterioration** of the finishes.

Traditional waterproofing (lime dhad on terracotta cup –coba) on the concrete slab roof finished in requisite slopes **mitigate the solar gains** effectively while allow for **efficient rainwater collection**.



THE FAMILY COURTYARD
Contemporize- Traditional



Contextualizing the Eastern façade:
Continuity of traditional architectonics, using traditional materials and methodology





The West And North End- Court: The existing built footprint was reduced to carve out a court to enhance the climatic response of the building.



Golcha Garden, Jaipur
(Ongoing since 2014)

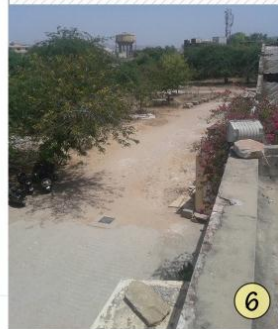
Phase 2
Conservation
Management &
Development Plan of
entire 12 acre property

Phase 3
Restoration of Historic
Gardens with all it's
built elements

Phase 4
Restoration of
The Palace- the Oldest
Building Layers



KEY TO READ THIS DOCUMENT:
The site is about twelve acres with distinctive features and various period architectural and environmental implications.
This factor led us to divide the site into ten sectors. The Northern boundary wall – 18 C construction- is taken as median. Thereby- starting from the East- as sector one and working clockwise from there till sector five. Sectors six- is the West-end land lying vacant while seven, eight and nine are bounding the built- median. Sector ten is the lowest level on site and thus is the ecologically sensitive area vis a vi the safety of the historic built fabric.
Condition Mapping for the property thus is framed sector wise. Cardinal directions within each sector further allow us to examine and record the vulnerability factors in detail. Photographic recording, with key numbers in plans and elevations as was possible- gives detailed information for future intervention and repairs.

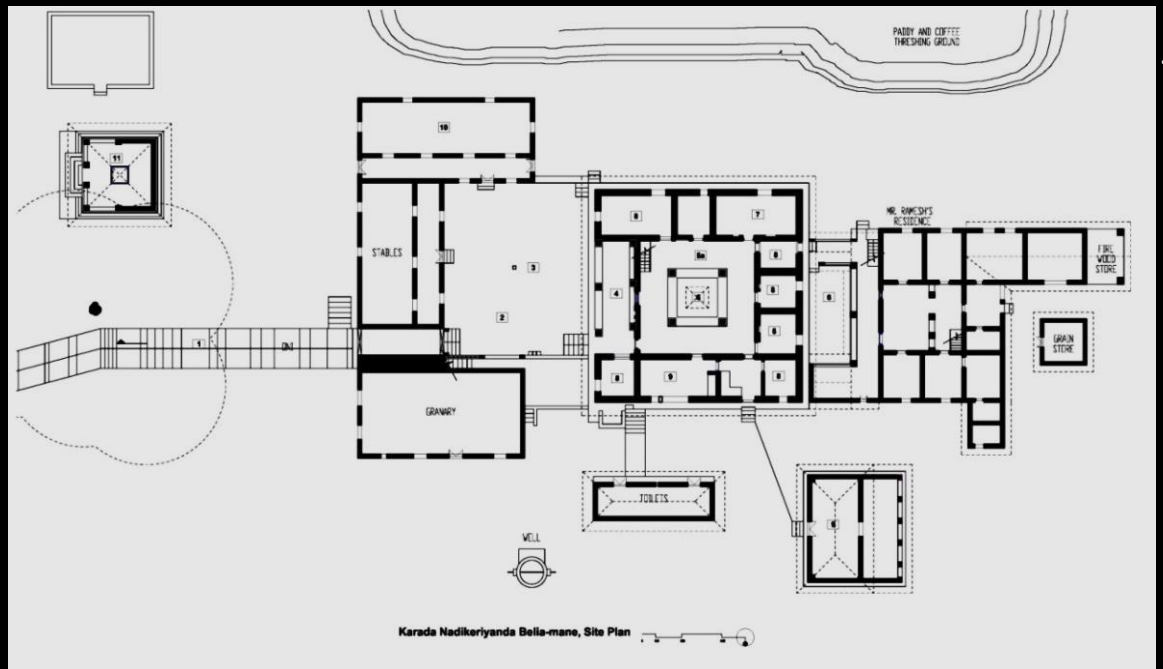


Coorg

Cultural Belief as instrument of
Continuum of built fabric



Ainemane:
Family (ancestral) Homes of Kodavas
embody the ancestors, who are revered as deities



(HECAR)



Conservation and development

200 year old Goan House Saligao Village

Arrest Decay- Add Design – Contemporary living in Heritage Homes



Goan House, Parra Village



Then....



Harness the Potential: Redefine USES of Spaces



now



Conservation and Development
100 year old Goan House Parra
Arrest Decay- Add Design – Contemporary living in Heritage Homes



Another 12 Goan houses
have been revitalised by us

Others too have find New
Uses. Popular are:

- Life-style stores
- Holiday homes
- Homestays
- Heritage Boutique Hotels
- Restaurants
- Book- Shops
- Architectural offices
- Art and Crafts Centres
- Library
- Pre& Play –Schools (Kids)
- Old Age Homes
- Homes for Destitute Women



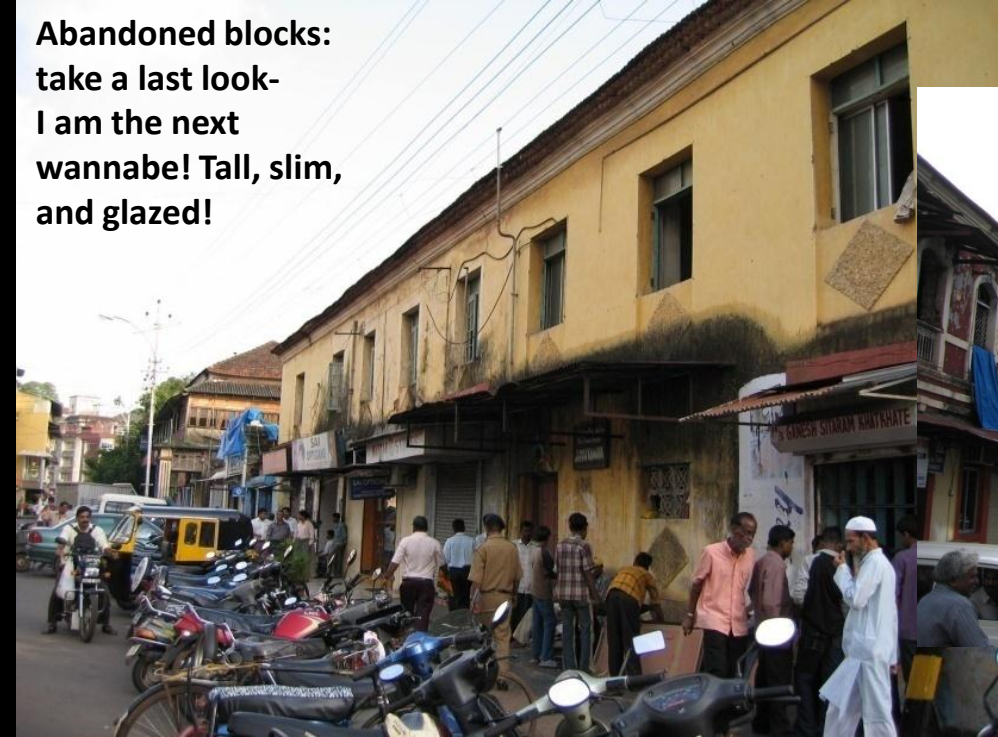
Fountainhas, Conservation zone
Panaji, Goa

ALL IS NOT WELL !

Abandoned blocks:
take a last look-
I am the next
wannabe! Tall, slim,
and glazed!

standing heritage being buried alive

FAR: weapon of mass destruction- of heritage



Panaji
Capital City of Goa

400 years of Historicity

Unplanned and Unregulated Tourism: Beach side villages are most vulnerable in present climate crisis era



Source: Net



BUILDER'S GOA **Second home craze** : build at the fastest pace and **least creative inputs for maximum gain**



SAVE GOA Campaign - PEOPLE'S PARTICIPATION IN PLANNING- August to December 2006

PUBLIC awareness process Aug - Dec 2006

Interpretation of RP 2011

Survey No. - Land Use

Colour Coding on Map- Settlement Areas:
Commercial, Residential, Orchard, Forest

Overlay on Google Map

The Finding: CONCRETISATION OF GOA!
Total disregard of Forests, Marshes, Mangroves, Fields,
CRZ Zoning : "most visible is settlement zone"

Draft Regional Plan 2021: Heritage, both Built and natural recognised as Eco-sensitive Zones
Public Participation in Planning has found a foothold



Panaji Mapping the listing for quantitative and qualitative information (2015-2018)

An archinova_environs research initiative- published by GHAG in 2018



03 | HERITAGE PANAJI | SAMPLE LISTING

A1
03

FONTAINHAS

61

161, St. Sebastian Road, Fontainhas, Panaji
c. 19th-20th century A80 **GRADE II A**

The family home of architect Amiris Ribeiro Santana, this residence-studio is a fine example of Goan Domestic architecture. It is a double storied structure with a low plinth, a rectangular layout and a sloping Mangalore tiled roof. The colour combination of the house is brick red and white is interesting with the white outlining certain elements of style. These elements include architraves at semi-circular arched openings, false keystones, pilasters, cast iron railings, a cornice band, quoins and corbels under the roof. Altogether a charming piece of work and a fine sample of architecture as art.



62

169, St. Sebastian Road, Fontainhas, Panaji
c. 19th-20th century A80 **GRADE II B**

A quaint balcony with built-in seats makes this house rather special in the precinct as the home becomes a community centre as evening falls. The house is a single storied structure with a low plinth and is built in the traditional style of using laterite load-bearing walls and lime masonry and plaster. Circular masonry columns support the roof and the heavy stone corbelling at the roof's edge give it a squat look.



63

CCF, 169, St. Sebastian Road, Fontainhas, Panaji
c. 19th-20th century A80 **GRADE II B**

This is a unique double storied structure with a low plinth, a rectangular layout and a sloping Mangalore tiled roof. The series of rectangular windows, smaller on the ground floor and full height on the first floor link it with Old Goa architecture, where the lower floors were meant for the servants while the upper floor was reserved for the Nobility. The property is sensitively renovated and is now the office of the Charles Correa Foundation.



A1
03
FONTAINHAS



This book presents an up-to-date status of the built Heritage of Panaji, comprising 907 entries, in 13 neighbourhoods - Ribandar, São Tomé, Fontainhas, Mala, Portais, Altinho, Central Business District, Campal, St Inez, Caranzalem, Miramar, Dona Paula and Taleigao - with high quality colour photographs, satellite features and area maps of the city for easy and quick taking a walk down memory lane.



THE CITY OF PANAJI

Take the story of its evolution on its streets. Showcase this story, with the Goa State, who has been at work for years to her realties - allowing for on the economic status, cultural practices, changes and the status of the people that shaped and reshaped the evolution. Created by Poojith Nair, MSc Architecture, with a foreword by Edgar F. Ribeiro.



THE MAPPED HERITAGE OF PANAJI, GOA 2017



THE MAPPED HERITAGE OF PANAJI GOA 2017

Co-Editor POONITH V. MASCARENHAS
Foreword EDGAR F. RIBEIRO



The Heritage Action Group (GHAG) is an NGO registered with the Registrar of Societies, Panaji, Goa, since December 2009. The aim of protecting Goa's tangible and intangible heritage. We protect our indigenous, multiple and delicate balance of public, private and commercial spaces in our well-planned communities. We have formed to our well-planned heritage sites drawing into multicultural motives for the preservation, evolution and sensitive dissemination of all sites and crafts. Thus, in turn will inform our successors that will ensure traditional architectural forms, material, methods and construction techniques for a contextual continuum. www.goaheritage.in ghaggoa@gmail.com



GOA HERITAGE ACTION GROUP WELCOMES YOU TO THE LAUNCH OF THE BOOK 'THE MAPPED HERITAGE OF PANAJI GOA, 2017'

archinova_environs initiative for GHAG

HERITAGE STATUS 2005-2017

Capital City of Goa State

Panaji lost* 124 Heritage Buildings in the last decade (2005-2016)

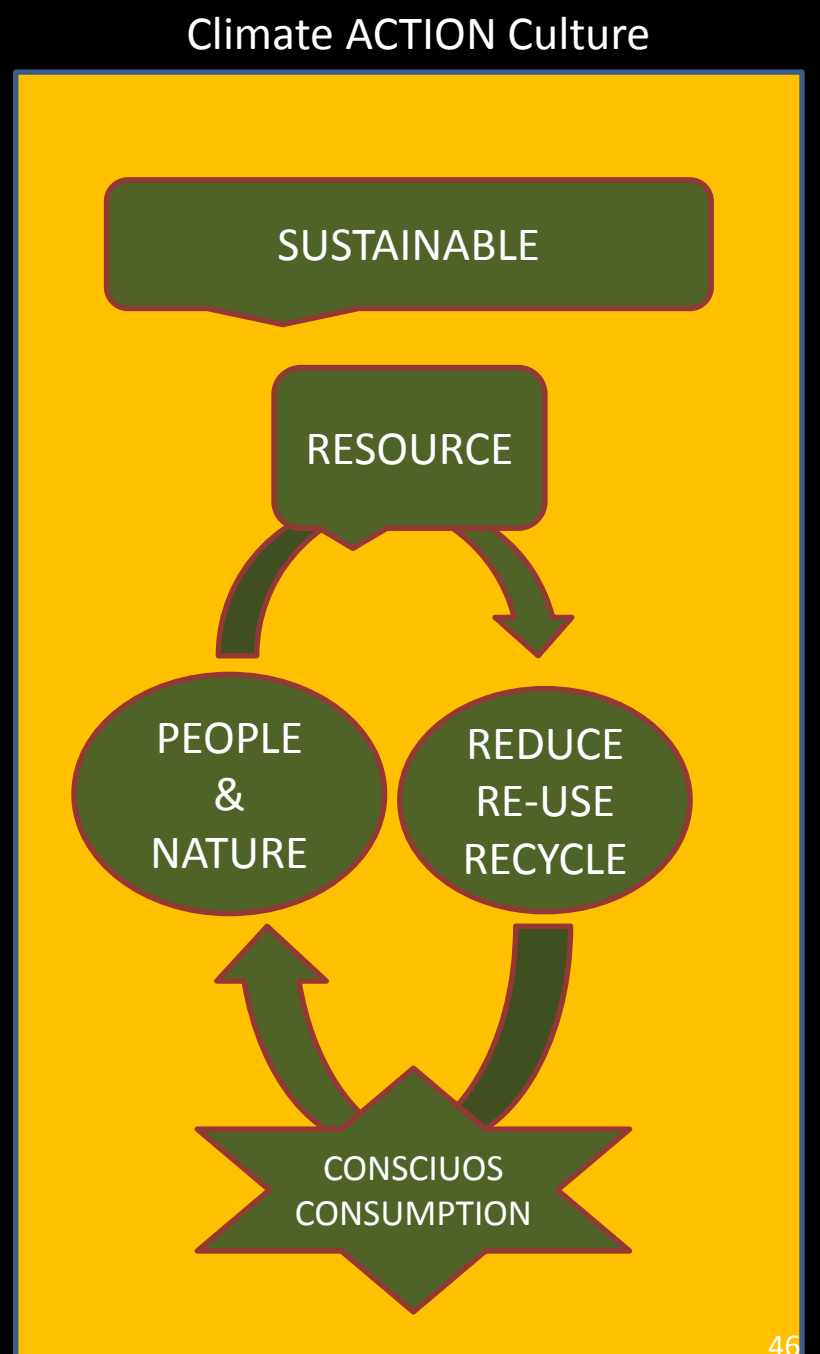
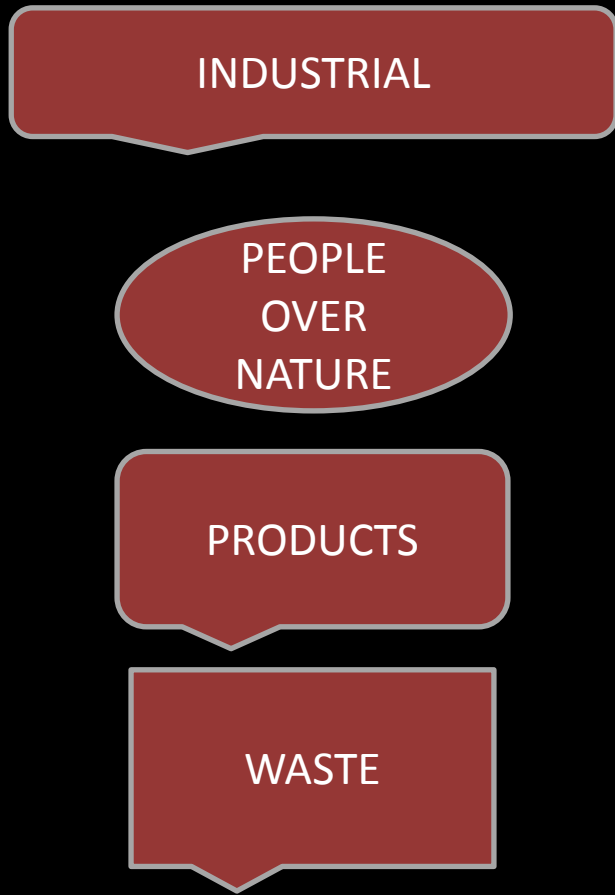
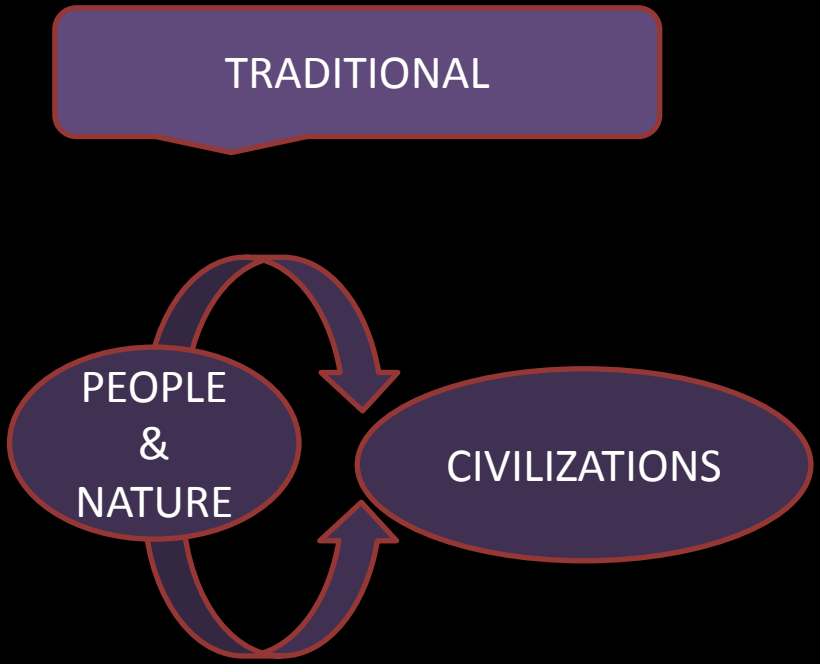
*(Delisted / Demolished/ Rebuilt/ Non-existent)

NO.	AREAS	FINAL NO. (2016)	GRADE I	GRADE II A	GRADE II B	GRADE III	DELISTED	DEMOLISHED/ REBUILT/ NON EXISTENT	NO. OF BUILDINGS ADDED BY ARCHINOVA	TOTAL (2005)
01	RIBANDAR	130	4	19	75	32	NIL	21	NIL	151
02	SÃO TOMÉ	165	NIL	28	93	44	7	9	18	140
03	FONTAINHAS	117	1	19	66	31	10	9	6	130
04	MALA	57	NIL	6	35	16	10	6	NIL	79
05	PORTAIS	75	NIL	4	49	22	NIL	7	1	80
06	ALTINHO	69	2	16	47	4	1	6	NIL	82
07	CENTRAL BUSINESS DISTRICT	202	3	36	120	43	7	13	3	220
08	CAMPAL	40	NIL	32	6	1	NIL	NIL	8	114
09	ST. INEZ	12	1	4	4	3	NIL	5	NIL	
10	MIRAMAR	13	1	2	8	2	NIL	1	NIL	
11	TALEIGAO	8	1	1	6	NIL	NIL	6	NIL	
12	CARANZALEM	11	NIL	1	4	6	NIL	5	NIL	
13	DONA PAULA	8	4	4	NIL	NIL	NIL	1	NIL	
	TOTAL	907	17	172	513	204	35	89	35	996

IMPORTANTLY, 907 are survivors and many amongst them are now re-furbished and earning a living through adapted re-use; and all this without legal protection;

Knowledge Gap: While we have often heard that the existing building is the greenest; but we have not yet quantified the carbon lost when it is demolished!

CONCLUSION



Cultural Resource Dynamics for Climate Action demands developing **strategies** wherein :

NATURE is nurtured as most valuable Cultural RESOURCE

Land, Forests, Fields, Rivers and Sea are Cultural RESOURCES and not a commodity.

Development is Conservation oriented (and vice versa) and Ecologically appropriate

All existing buildings, including 20th C buildings are resources for their embodied energy and must be put to appropriate use and not demolished.

Citizens are co-participants in shaping the future of the country.

All built environment professionals: Planners, Architects and Engineers, and allied-Builders, Developers, Hoteliers etc. need to work together to facilitate the process and take more ownership of the role of custodianship.

THANK YOU

archinovaindia@gmail.com

