



LIVING WISDOM

A STORY OF A RIVERINE CULTURAL LANDSCAPE OF ASUD BAUG IN KONKAN

Country /City India /Pune
University / School Dr. B.N. College of Architecture , University of Pune
Academic year 2021-2023
Title of the project Living Wisdom : Conserving Vernacular Agrarian Riverine Cultural Landscape of Asud Baug , Konkan, Maharashtra
Authors Dr. Swati Sahasrabudhe, Anupama Khatavkar, Neha Adkar, Kshitija Kolhatkar, F.Y M.Arch Students

TECHNICAL DOSSIER

Title of the project	Living Wisdom : Conserving Vernacular Agrarian Riverine Cultural Landscape of Asud Baug , Konkan, Maharashtra
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Title of the course	Masters in Landscape Architecture
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Written statement, short description of the project in English, no more than 250 words

In this studio theme of understanding '**cultivated inland riverine fragile landscape ecosystem**' wrt 'Asud' as a representative example of a small village in 'Ratnagiri', Konkan, Maharashtra, India, **aims to propose rural landscape conservation and planning policies, design in context, conserving the vocabulary of design and planning and answer the question of 'what should be the role of landscape architect in a context specific design' on a macro and micro level.**

The intent of this study is to analyze such **unique, fragile river ecosystems**, setting of these cultural landscapes, understand the 'preserved traditional setting', involvement of communities in shaping, these land parcels as a part of daily life, cultivated landscapes, economics and its relation to traditional practices, demands of the future from the land etc; by studying example of 'Asud' as one such village near Dapoli.

Nestling into the 'Sahyadris', spread along a seasonal westward flowing river 'Asav' and it's inseparable bond with 'Keshavraj Temple', unfolds a story of 'Asud' – a small village plentiful in **ecology, culture, traditional wisdom, unique landscape character, diverse geomorphology and a legacy** in itself.

The studio intends to find answers to the following :

1. Responding to the 'Indianness' of such settings in terms of design and planning
2. Future sustainability of the landuse of these villages
3. Role of Landscape Architecture at macro level, contemporary layer and new vocabulary, design and planning approach.

For further information

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SCHOOL PRIZE

TRADITIONAL IRRIGATION SYSTEM : PAAT (Living Wisdom)

Asud has a very old irrigation system which is now used to irrigate supari plantation. This system is purely based on gravitational force.

•Typically in Asud diversions can be seen for the irrigation purpose. It means the river on the highest elevation is diverted and then the water is collected by building 'kachha bandhara' for further collection and diversion of water.

•This collected water further goes to the Supari Baugs through channels which the local resident call the PAAT.

•These channels are then further divided into sub channels which flows throughout the bunds from the Baugs.

•There are total 45 Inlets present to the main channel / PAAT.

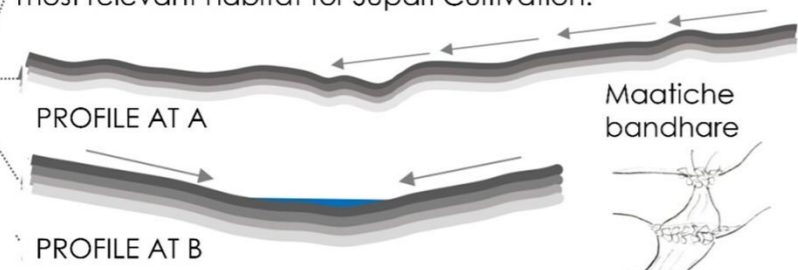
•It is stated that this PAAT System is in use from 400+ years. Making it An Irreplicable part of Asud's Cultural Tradition

•Asud is situated on such topography which makes it the most relevant habitat for Supari Cultivation.

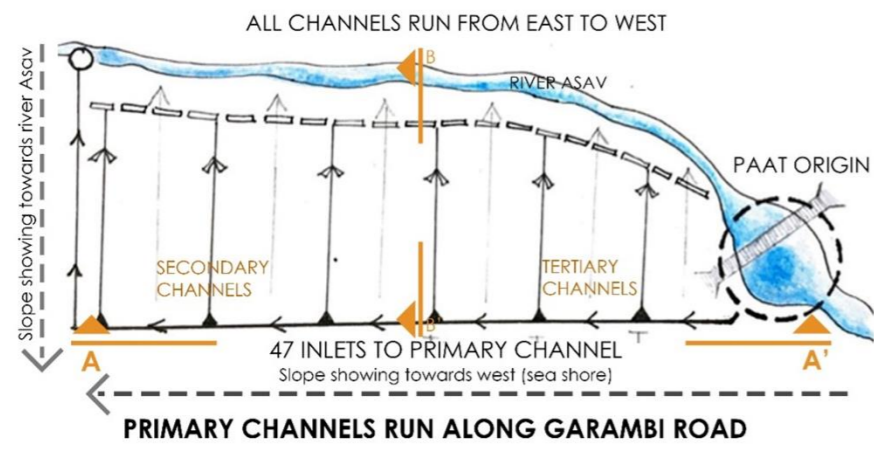
PAAT

TOPOGRAPHY

SUPARI



•Supari plant needs two things to flourish -slopes and lots of water to grow, which are naturally present in Asud.
•Supari baugs are owned by residents from Dabke wadi.



NETWORK OF PAAT

- 1.Diversion
 - 2.Split, Distribution
 - 3.Overflow
- The method of supply and distribution

1. Diversion



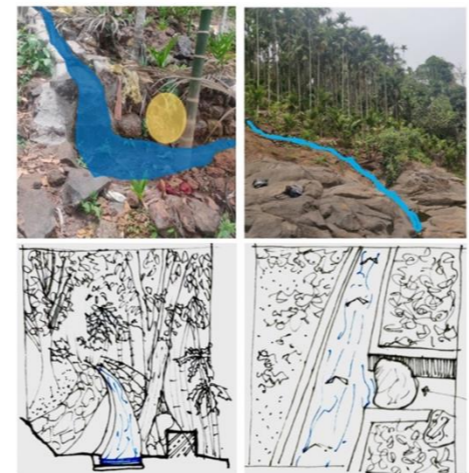
Origin of Paat Diverted water channel from origin

2. Split and Distribution

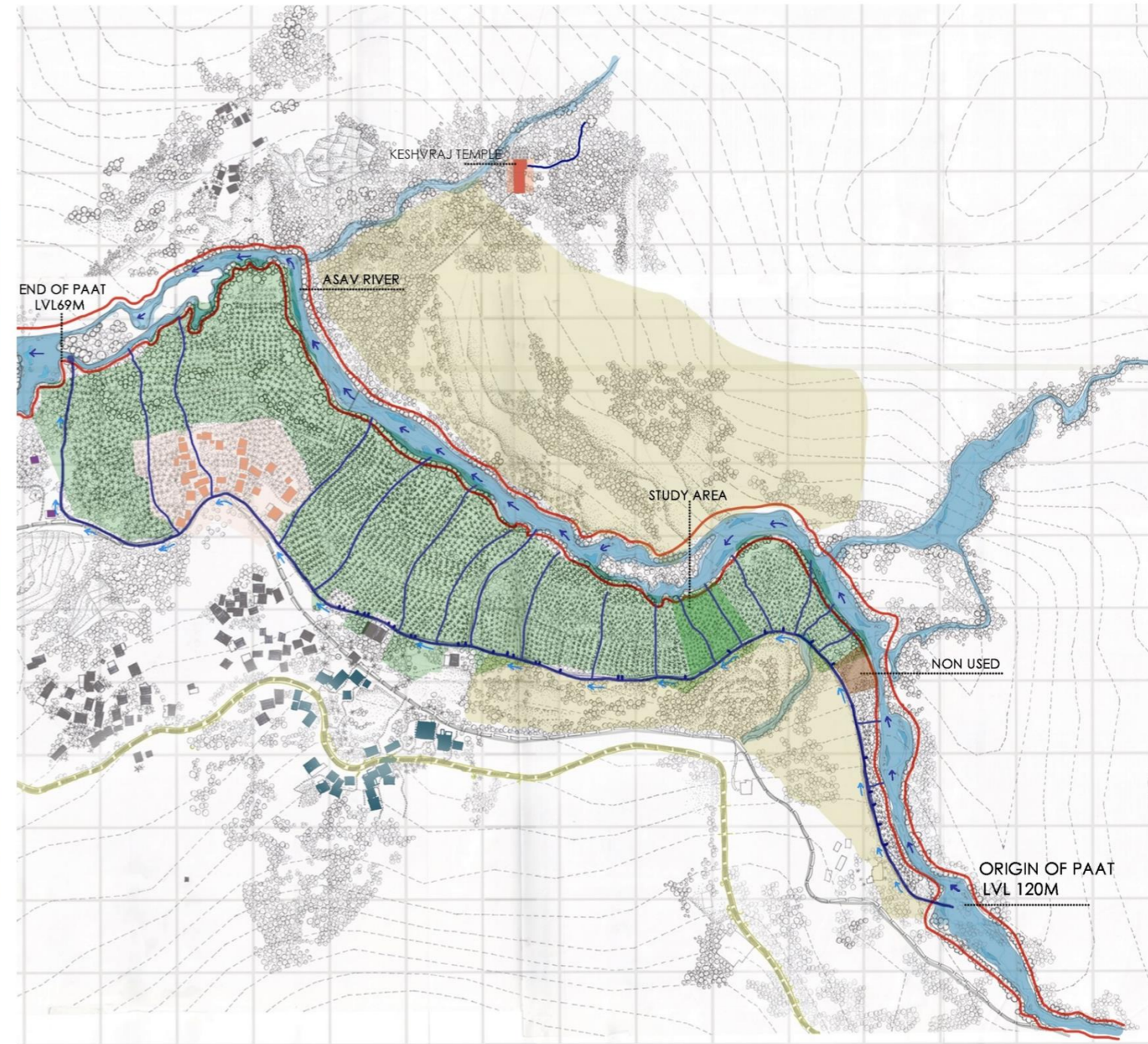


Splitting the primary channels in secondary channel Splitting the secondary channels in tertiary channel

3. Overflow



Inlet act as connecting point between primary channel to secondary channel Supari Baug (Modem)

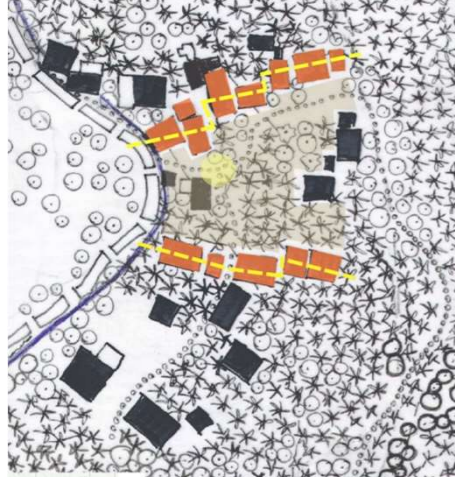


● KESHAVRAJ TEMPLE	● SECONDARY FOREST	● SUPARI BAUG	○ PAAT LINE	TOTAL NO OF BAUG OWNER : 27
● LAYOUT PAAT	● RIVER	● DABKE WADI		TOTAL NO OF BAUG : 27
				TOTAL NO OF INLET : 47

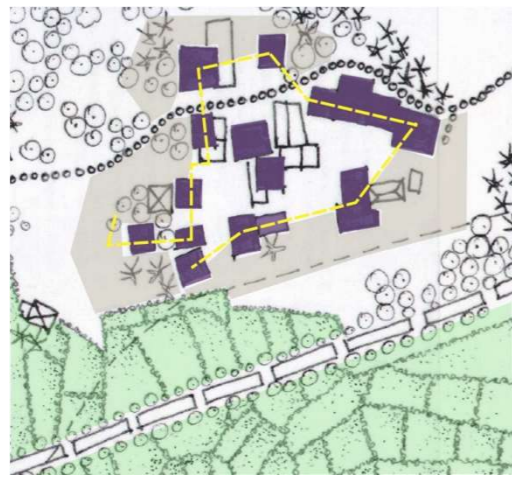
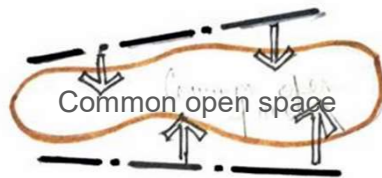
AREA IRRIGATED BY PAAT AREA : 47.3 ha

SPATIAL ORGANISATION (micro level)

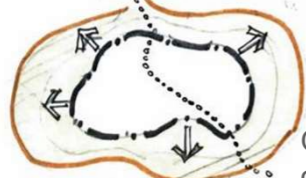
Traditional settlement is a result of logical understanding of topography by earlier generations and hamlets evolved on the basis of resource availability and occupation



Dabake wadi – linear cluster form on slope and facing each other



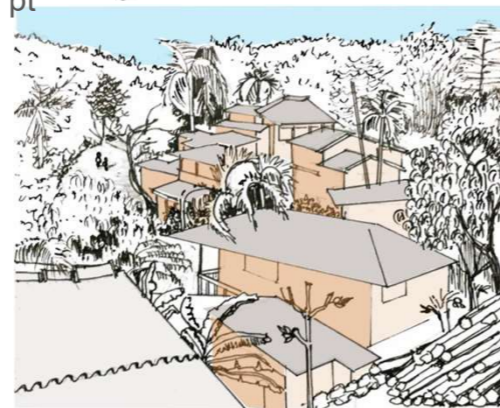
Bandre wadi – linear cluster form on very gentle slope and vegetation at periphery.



- Shared open space of cluster
- Developed across the contour, forms linear stepped form of cluster.
- Bandre wadi – is developed on flatter land along the river Bhat-khindi (Asav) newly constructed houses, new construction materials are introduced here.



Tambadicha kond – random cluster form, On steep slope so closely placed entr



- Visual association of built and natural feature
- Development on higher elevation created prospect area
- Divided into two terrains upper and lower due to highway

STAKEHOLDERS
 Primary: Baug owners and workers, residential land owners, home workers, home stay owners, senior citizens, small scale business owners and workers, paat system manager families
 Secondary: Business community small scale, non residential land owners, job employees
 Tertiary: tour agents and organisers, general visitors, tourists

ISSUES



I1: Planting palette has evolved from native to exotic plants in home garden.



I2: Waste management increased due to tourism related activities causing increase in non-degradable waste.



I3: Dependency on nearby cities for basic grocery needs.



V1: Supari and spices cultivated in the baugs are major contributors to Asud's economy.



V2: Traditional and functional paat system is intact



V3: Balanced riverine ecosystem is maintained due to dependency on the resource.



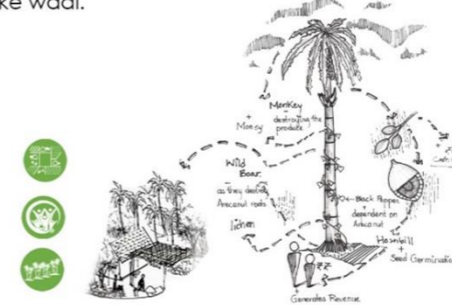
V4: Architecture and landscape design vocabulary is relatively intact within Dabke wadi.



V5: Architecture and landscape contributes to the intact microclimate within the Wadi.



V6: Provides local employment through tourist activities, cottage industries and cultivate baugs.



V7: Sustainable living practices like life cycle of supari, garden to plate, use of local material.



V8: Seasonal garden to plate concept with species like banana, alu, fanas, jaam, allspice, nutmeg, black pepper etc grown in home gardens along with flowering species like aboli, jaswand, alamanda, ixora.

VALUES

CULTURAL WALK ROUTE

A to B: Dabke wadi to Keshavraj Temple
 C to D: Paat
 E to F: Bandre wadi to Bhaatkhandi
 G to H: Tambidcha Kond



ACTIVITIES TO DO:

- Learning cooking techniques and experiencing the local cuisine through interaction with the people.** (Icon: A woman cooking at a stove)
- Learning to make jackfruit chips, ambavadi and other local products.** (Icon: A woman processing jackfruit)
- Buying home made products like sarbats, fruits, papads, pickles, etc on the trail to Keshavraj Temple.** (Icon: A market stall)
- Experience of working on the farmlands and orchards, plucking fruit.** (Icon: A person picking fruit from a tree)
- Hands on working sessions in the rice fields during the monsoons, eg. bhaat lavani** (Icon: People working in a rice field)
- Short hike up 'Tambidcha kond' to experience the mesmerizing view of the entire village and the sea beyond** (Icon: Two people on a hillside)
- Forest foraging during seasons to taste the wild fruits and vegetables.** (Icon: A person foraging in a forest)
- Experience the paat, through a prototype made for tourists** (Icon: A scenic view of a valley)
- Hike up to Keshavraj temple, experiences of the climate, terrain, flora and fauna, smells and sounds of Asudbaug.** (Icon: Keshavraj Temple)

The vernacular cultivated landscapes in Asud Baug, along the river 'Asav' in Konkan, unfold many layers. It is a continuous process where man and nature evolve in tandem with each other, supporting, unifying, and enhancing the experience of living, resulting in the traditional living wisdom of settlements which is still operational. **The interdependency of communities and their mutual understanding defines the integrity and authenticity of Asud's cultural landscapes.** Living wisdom is in a cultural continuum with the pressures of the modern concept of 'development'.

Walking along the 'river Asav', seeing the change in the flora and fauna diversity, makes one realize how nature has its take on everything man has done. Both sides of the bank have different characteristics in terms of vegetation. One is moist deciduous whereas the other is dry deciduous. Overall, Asud and its traditional connections are rooted in nature. Thus, nature and people share a symbiotic relationship. The field ecology helped acquaint one with identifying the flora and fauna species and their botanical names.

It is crucial to understand the hierarchy (primary, secondary, and tertiary) of **stakeholders, both human and non-human**, in order to **identify the user groups and their needs**. This study helped in the proposal framework and strategies. The intangible aspects and ecosystem services of vernacular landscapes are the driving force behind **sustainable living practices**. Based on this, one can infer that synergy exists among communities in such a setting.

By observing and analyzing the significant landscape characteristics and combining these stages of work, one can infer the **interdependencies between human interventions, natural processes**, and their positive and negative impacts. In the entire process, **the role of a landscape architect is to bridge gaps between ecology and economy through a socio-cultural approach bringing all in unison.**