

Satish Misal Educational Foundation's



BRICKTM
SCHOOL OF ARCHITECTURE



SUSTAINABLE RURAL DEVELOPMENT

Under Flagship of Unnat Bharat Abhiyaan Elective for
Fourth Year B.Arch. Term II 2022-23

EXTENSION ACTIVITIES

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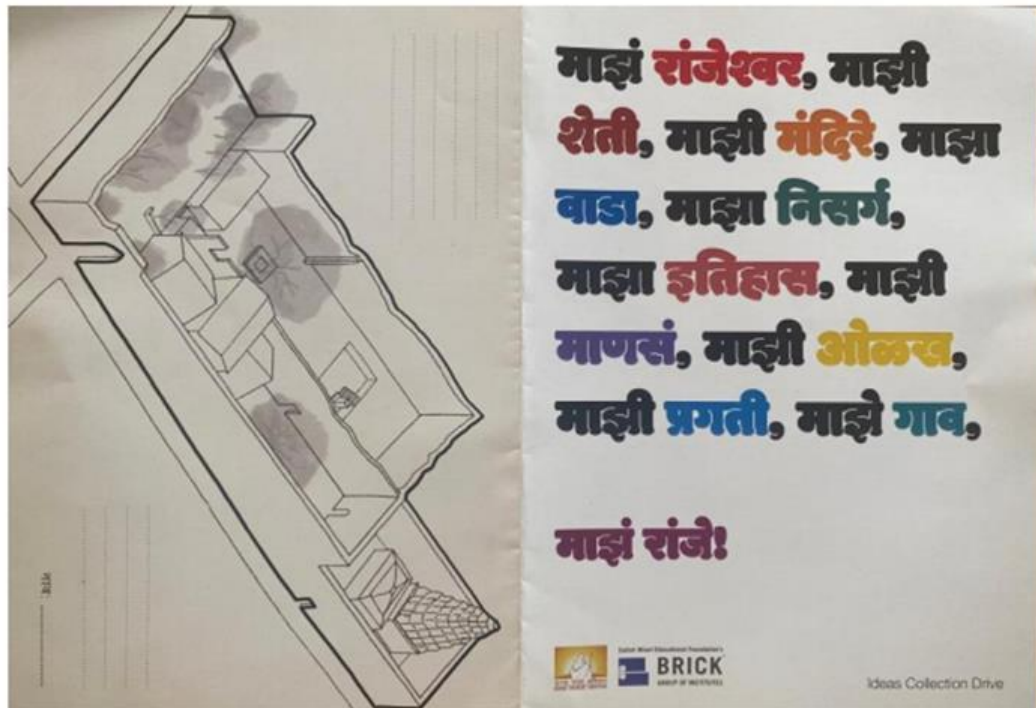
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The projects envisaged

Following are the glimpses of these activities.

1. Women Empowerment centre at Ranje

Ranje village, located in Purandar Taluka, Pune district attracted attention of the team of SMEF.'s BSOA by its heritage of temples and wadas, which are in a ruined state now. The identity of the village needs to be regenerated. After the detailed survey done in the village a number of issues were identified, where the consultancy cell of the institute, i.e., B_RADICL can intervene with the proposal. With the lens of architecture, they had a number of ideas to regenerate these sites, however, the team gave more importance to the residents and their opinion. The students prepared an attractive pamphlet with a 3-D view of the village and which had scope of asking the preference of use of space. This initiative involved a unique ideas collection drive that engaged residents in a fun and interactive way. Through the distribution of colourful pamphlets with various colouring exercises, the villagers were able to learn more about the local customs and traditions that make Ranje so special. The following images show the images of the pamphlet. Figure 3 shows the pictures of the drive.



Pamphlet for ideas collection drive



Pictures of ideas collection drive in Ranje village

The success of this initiative was evident from the overwhelming appreciation expressed by the residents. The collection of ideas from the community not only helps to promote the village's unique character but also serves as a roadmap for future efforts to preserve and enhance its cultural heritage. This is especially important in today's rapidly changing world, where traditional ways of life and cultural practices are increasingly under threat. By embracing the rich history and culture of their village, the residents of Ranje have shown that they are committed to ensuring that it remains a vibrant and culturally rich community for generations to come. Such community-driven initiatives are a great

example of the power of collective action and the positive impact it can have on society. In the end, students collected ample ideas from the children and adults on the scope of interventions and creative boundaries for the village.

The adaptive reuse of the wada was conceptualized in the form of a Women's Empowerment Center. However, with the consequent interactions with the villagers and site visits, the team realized ownership disputes of Wada property. However, there is a large piece of land available near the temple premise. This premise can serve as a gateway to the village. The proposed design can integrate the heritage character of the village in the design.

2. Playscape design at Waravdi Village

The site is a void in the peri-urban area of Pune District. It is located at Waravdi village, which is at 29 km on South of Pune and can be approached by Pune Satara Road. The nearest landmark is Ayojan School of Architecture. This proposal is an intervention of contribution by higher education institutes to a village development activity through design of a cognitive built environment for the toddlers of Anganwadi. In this regard, the team had given a thought to activating a dead space in the village in a creative and a sustainable way. The selected site is an open area in front of Anganwadi school in Waravadi village. This premise has one room as Anganwadi, one room for classes 1-4 (where all the students share a classroom and two teachers) and one room as office space. The present situation of less teachers and less children is working well as the teachers are efficiently running the school. The children have space to play but have very little playing equipment. The team identified an area of 40mx20m in school, studied the activity pattern, and gave a proposal of transformation to offer a playful and cognitive environment.



The stakeholders involved in the project were- the local authority, village panchayat, the school authorities and the toddlers (the end users). The initial discussions had happened with the villagers to identify the issues in the village. One of the issues was that the local residents looked keen towards giving quality education to their children. Hence the expectations from school were high. The village panchayat is presently involved in providing bare minimum infrastructure in the village, and have their own limitations. S.M.E.F.'s Brick School has identified their scope of work by clubbing the academic activity of playscape design with real ground application in this village.

PLAYSCAPE(LANDSCAPE SUPPORTING CHILDREN SELF DIRECTED PLAY)




CLASSROOM OFFICE
CLASSROOM
GREENSCAPE EXISTING PLAY AREA
ROAD SITE PLAN

EXISTING SITE: WARAVDI,PUNE
OPPORTUNITIES OF INTERVENTION ON SITE



MODEL OF SITE AFTER INTERVENTION
JUMPING ON TYRES CROSSING THE BRIDGE TACTICAL GAMES
SAND PIT SENSORY PATHWAY




OPEN SOFT SCOPE AREA
HARDSCAPE PATHWAY AREA
HARDSCAPE AROUND FLAT POST

CONCEPT: TO CREATE A PLAYFULL ENVIRONMENT FOR A CHILD



PAINTING ON WALL FOR COLOURFULL ENVIRONMENT AROUND TACTICAL GAMES FOR BRAIN DEVELOPMENT OF A CHILD
CLIMBING AND JUMPING GAME USING TYRES WHICH ARE FLEXIBLE TO PLAY ON

SITE AFTER INTERVENTIONS (VIEW)



VIEW OF THE SITE TYRE CATERPILLER DONGER PANI
CLIMBING THE MOUNTAIN GAME PERFORATED BRICK MOUNT WITH BRIDGE TACTICAL GAME

The team of 4 faculty and 21 students got the opportunity to experiment the design and 30 toddlers in the village were benefited by this intervention. Following are the photographs of students and faculty, while doing these interventions at site.



Playful Learning- Coordination, brainstorming & learning



Balance, Coordination & interaction



Height Measuring Giraffe



Creativity



Space allowing user to creatively plan their games



3. Educational material for creating awareness about government policies in villages

The major findings of initial surveys of Unnat Bharat Abhiyaan in the villages are that they are not aware about the government policies. The present policies can be availed through some process from an online portal. However, the villagers don't have smartphones, computer literacy and in some cases the internet connections are also absent in the villages. Hence, the team has given a thought of creating a reading material in user-friendly language. This is a generalized proposal and can be exercised in a number of villages. Project proposal is to Design of the print media to spread awareness of the policies in the local language. The present form of the policies is available online; however, it is out of reach for the present villagers. Hence this group translated the information in the local language and compiled it in user friendly format. This information will be put in a booklet format and distributed to the villagers.

The distribution of these booklets is proposed to happen in an event format. In this event, the villagers will be invited for an awareness session and will be given an overview of these policies and then these booklets will be distributed to them. 14 various policies have been studied by the team and they compiled it in the A-5 booklet. The identified stakeholders are the Village Sarpanch, villagers and the relevant government authorities involved with the policies, as the villagers are going to get in touch with them after this awareness campaign.



4. Proposal for Agro-tourism-centre for urban school children

Background- The twin villages, Thapewadi and Waravdi villages are nestled in the scenic beauty and depict a rich ecological and vernacular architecture character. The overall environment quality is good. Figure 4 gives the glimpses of the overall environment of the villages Thapewadi and Waravadi. The experience of farming practices and rural way of living can be a good learning experience for the school kids of urban areas.



Figure 4: Glimpses of Thapewadi and Waravadi village

Even if the urban kids belong to economically resourceful families and are part of high-end educative institutes, they have struggle of commuting through traffic, polluted lands, odors from the dumping of solid waste on road sides, polluted streams, air pollution through vehicles and industries, etc. A one-day tour in village can do much more in terms of fun and learning than a mundane routine of the city life. A day in a village can give many opportunities to learn about agricultural practices and diversity of food grains which they consume on daily basis. The value of food through sensitization about the efforts and time taken in the farming.

A farm can educate the kids in a number of ways. The mathematics of geometry of the edges, pattern of ploughing, area, perimeter of hedging, science of irrigation by gravity, the science of plant growth, management and phasing of all farming operations, taking care of plants, animals etc. are some of the examples, which can be very well taught in the villages.

The interaction with villagers can sensitize the school kids about various physical activities and efforts they take in day-to-day life. The rural area may enrich the knowledge of school kids by giving exposure to bio-diversity, farming practices, and optimization of resources for minimalistic life.

The learning from rural areas can also be attached with the cultural practices, folklores, food, clothing, etc.

The houses in these villages are built with locally available material and have their own charm. The youth from both the villages are migrating towards, the cities. The near-by industrial areas in Khed-Shivapur has generated some employment opportunities, however the economy is still struggling. The idea of Agro-tourism centre is conceptualized for upgrading the economies in the village. Including the post monsoon and winter months, there are 100 days in a year, in which weather is pleasant and can be enjoyed well by the visitors.

Aim- Spreading awareness about farming practices, vernacular architecture and minimalistic lifestyle in the urban children

Project proposal- The proposal includes construction of a long span shed with a kitchen and toilet. The school trips can have discussion and lunches in the designed shaded areas. The time when the school trips are not there, the same space can be utilized by the village people, for community activities. Idea board of this pavilion is given in figure 5.



Image source: gallery of Community Pavilion at Jintao Village / Scenic Architecture. Photograph by Scenic Architecture, Arch daily



<https://arquitecturaviva.com/works/pabellon-de-bambu-tulum->



The students of the institute have already designed and made similar structures in the workshops in the campus under guidance of experts. This picture gives a glimpse of the workshop that took place in the Brick Campus in year 2021.



The financial model can be understood by this.

Sr. No	Title	Cost
1	Days of employment	100
2	Average visitors per day	100
3	Expenses incurred on one visitor per day (for food, water, electricity salary of the staff, maintenance of the space)	INR 200/-
4	Fees can be charged per day	INR 700/-
5	Profit earned by fees charged to each visitor per day	INR 500/-
6	Income generated per year	INR 50,00,000/-
7	Initial investment for construction	INR 45,00,000/-
8	Cost of STP, and site services	INR 5,00,000/-
	Payback period	1 year

The income generated next year onward with incremental cost of 5% = INR 50,25,000/-

5. Awareness material on local heritage

While implementing the playscape project of playscape in Waravadi village, it was realized that the profession of architecture is not known in the rural areas. To create awareness among the villagers, a thought was given to create an educational material on forts in the nearby villages. A fifth-year student of the institute Tanay Lalwani has done a lot of research on the forts. He guided the students to prepare this material. Following is the image of the banner that they prepared, and the photographs of the students while interacting with the villagers.





महाराष्ट्रातील स्थापत्यशैली



किल्ल्यांचे प्रकार

किल्ला म्हणजे काय ?

किल्ला म्हणजे तटबंदीयुक्त ठिकाण ज्यामध्ये राजा, सैनिक व त्याची प्रजा असते. गढी म्हणजे तटबंदीयुक्त घर किंवा मोठा बाडा.

गिरिदुर्ग

गिरिदुर्ग म्हणजे डोंगरावर बांधलेला दुर्ग.

कोरगाड

गिरिदुर्ग



जलदुर्ग

जलदुर्ग म्हणजे पाण्यात बांधलेला दुर्ग.

जंजिरा

सुवर्णदुर्ग



भुईकोट

भुईकोट म्हणजे भूमीवर बांधलेला दुर्ग.

नाडदुर्ग

पंढरा



सिश्रदुर्ग

जमिनीच्या किल्ल्याचे वेळेनेला डोंगरी किल्ला.

गोपाल गड

सौलतारवाचा किल्ला



सागरी दुर्ग

समुद्रकिनारी बांधलेला किल्ला.

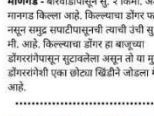
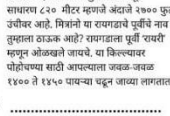
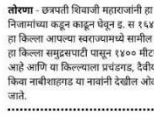
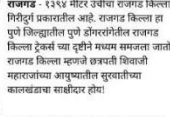
कोलाबा दुर्ग

शिखरदुर्ग

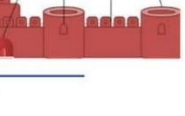
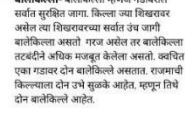
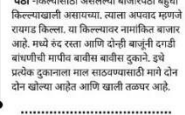
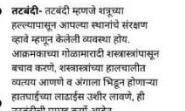
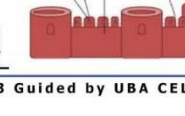
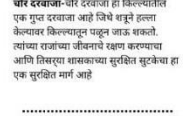
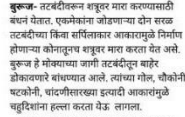


माणगाव जवळचे किल्ले

कुर्कुण्ड - विभागात किल्ला २०२० फुट उंचीचा कुर्कुण्ड - विभागात किल्ला गिरिदुर्ग प्रकारातील आहे. रामगड किल्ल्यातील रामगड डोंगरावरील कुर्कुण्ड - विभागात किल्ला ट्रेक्स व घाट्टीने सोपा समजता जाते.



किल्ल्यांचे घटक



4th Year Batch of SMEF's Brick School of Architecture 2023 Guided by UBA CELL

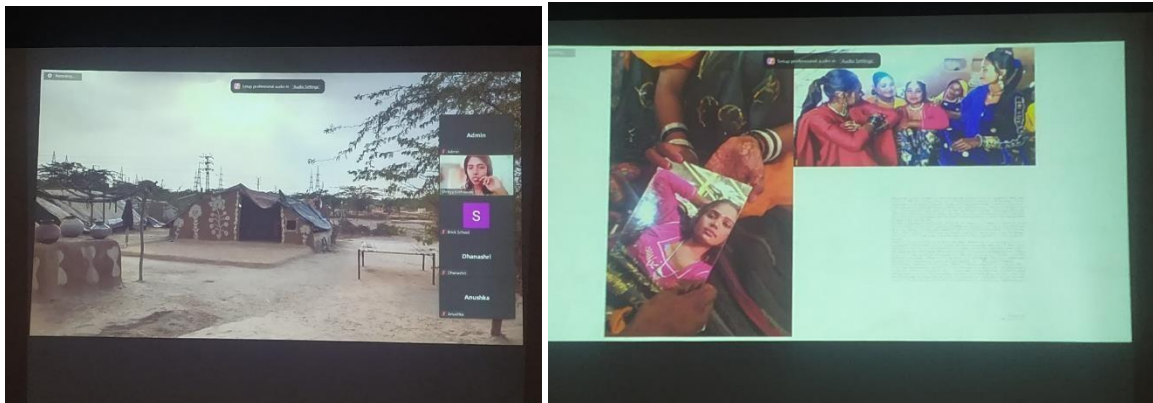
Students' work in detail can be seen on this link.

<https://drive.google.com/drive/u/1/folders/1qDgp0tluLHMCe1rWyVY7Ch0eKskw12I>

Innovation and Enrichment in teaching

The teaching included group activities which imbibed values of peer learning. It also helped address the diverse background of each student, which was respected and everyone's strengths were taken advantage of for group activities. This brought in professional ethics and human values of respecting each individual.

Guest lecture on “Community Participation” by Brick Alumnus “Ar. [Shreya Kothawale](#)”, who is a part of an NGO called “**Abhat**” and facilitating community-led design and advocacy and contributing towards rural development activities. She talked about her experiences regarding socio economic conditions of the remote villages, the challenges faced by them and how a designer can interact with them in a constructive manner and offer sustainable solutions for living. Her input helped the students to interact well with the villagers and find out appropriate solutions.



Shreya Kothawale’s online discussion session



Brick Students interacting with the villagers

Report on Community Participation:



For the Community participation, we visited the primary school in that village and took some fun activities.



The school had approximately 40-45 students from 1st-4th std. All students were from the same village. i.e., Thapewadi.



Fun activities for students

We indulged the children in fun games and activities in the play area. All students participated in the activities with full enthusiasm. Gifts were given to all the students for active participation. Also, we had conversation with the school teacher for holding such activities for the kids.



Students introducing themselves



Photograph with School kids



Photograph with a few villagers who we interviewed

Brick Students interacting with the village children

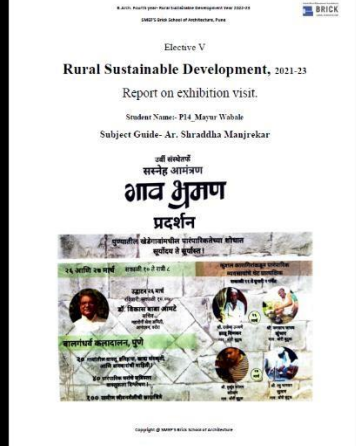
As a subject enrichment activity, the students were suggested to visit the Gav Bhraman exhibition on March 26th and 27th, 2023. This exhibition was organized by an NGO 'Urvee' in Pune city to

demonstrate the positive side of vernacular architecture. The exhibition aimed to raise awareness about the importance of conserving village history, traditions, local food, and festivals-their importance and lifestyles in our village, and showcased the efforts of local organizations and volunteers in preserving our community's cultural heritage.


The exhibition was a documentation of 20 villages. 40 traditional houses were documented and showcased. The main motive of this exhibition was to highlight the village lifestyle and its identity. In this exhibition, some arts and crafts were presented by the residents of the documented villages. Those crafts are one of the income sources of those villagers. In this exhibition, documented houses were presented on the panels. The design of the house, and construction techniques, materials used, passive strategies used, relation with nature. All these things were presented in one section. One section focused on historic buildings and their architectural features, while another showcased photographs and artifacts from local historical sites. There was also a section dedicated to the work of volunteers and community organizations in preserving the village's cultural heritage. Dr. Vikas Baba Amte was the chief guest of the exhibition.

The learnings from this exhibition were very well taken by the students. Following link contains the learnings of the students from Gav Bhraman Exhibition.

https://drive.google.com/drive/u/2/folders/1ers_bfxiiFQt1npB4r6nTsfBJE6ve20

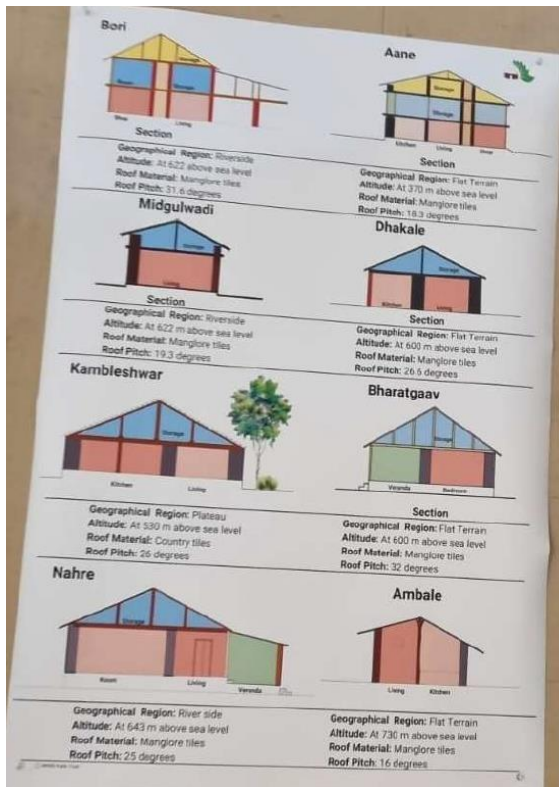


BRICK
 Elective V
Rural Sustainable Development, 2021-23
 Report on exhibition visit.
 Student Name:- P14, Mayur Wahiye
 Subject Guide- Ar. Shradha Manjrekar
 जी हबेकर
 सनेह आमरण
गाव भ्रमण
 प्रदर्शन
 सुभाषी वडेकराचार्य प्रास्ताविकात्मक शीका
 प्रदर्शन हे मुख्य हेतु।
 १५, १६ आणि १७ मार्च २०२३ रोजी
 डॉ. विनायक लाल शिंदे
 यांच्या अध्यक्षतेखाली
 आयोजित करण्यात आलेला
 गाव भ्रमण प्रदर्शन
 या प्रदर्शन मध्ये
 २० गावांचे
 ४० परंपरागत घरे
 यांचे
 १००० चित्रे
 प्रदर्शित
 करण्यात आली.
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Gav Bhraman Exhibition *75yrs of Pottery- Shri Jagannath Jadhav*

The initiative helps to improve the living standards of individuals in rural communities by providing access to essential services such as healthcare, education, and housing. Empowering rural communities through sustainable design practices can promote economic growth and encourage local entrepreneurship by collaborating with local communities, architects can help preserve cultural heritage and identity, while also respecting the environment and promoting sustainable development. This approach can create a sense of ownership and pride among community members, leading to a more resilient and self-sufficient community. The initiative made me understand that architects have a unique opportunity to play a crucial role in empowering rural communities through thoughtful design and engagement with local stakeholders.



Meeting the Program Outcomes

Theoretical Base - Low cost playscape design for amenities and infrastructure, Community engagement in village development and

Knowledge and Skills- The exposure to the rural context was given to the students. Also the skills for involving community in the project and Project ideation were developed

Values- The values of the assets that the nation has in terms of our rural areas were developed in this subject. The inputs, explorations and discussions are planned with this consideration.

Research- The works of past and development of thought process of one's contribution was inculcated through the explorations given in the course.

Creativity- This course connected the knowledge and skills to the application base

Collaborative Working- The students got connected with the various agencies for collaborative working in the rural areas.

The course in general focused on sensitizing the students for Inclusivity, developing technological knowhow. Practice and Ethics, Changes and Diversification were the integral part of this course. And along with the other courses it will develop the ability to choose area of specialization / Practice



Team of the students under Elective of Sustainable Rural Development