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Theory Based Design Practice Today

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Abstract: This review examines three main theories that establish the design processes of renowned architects in the discipline today. They are: Critical Regionalism, Phenomenology and Contemporary Indian Treatise. They are discussed in the hierarchy of their introduction in the society and accordingly are the amount of explorations done on them. Names of the architects who are using these as design processes are mentioned at the end. After the study of the three theories; the review observes their overlaps and bridges that if connected may provide a consensus model of design process from three prominent design theories.

Key Words: Critical Regionalism, Phenomenology and Contemporary Indian Treatise, Steven Holl, Charles Correa, Ashish Ganju, Narendra Dingle.

Introduction

A discussion of theory always brings to mind an opposition to practice; that is exactly why the two have been adopted simultaneously in one review paper. These theories are like a background study, an explanation, an ideology of the design to come. These theories are not a tool for direct implementation in design.

"As theory without practice is lame and futile, and conversely practice without theoretical foundation is blind and at random" (Dingle, 2013)

Design methodology is the step wise tool for design process. This process or method can be evolved from the theory when researched and interpreted in detail. The gap between a theory and practice of design can then be bridged by the use of this process tool. The process can be any sort of brainstorming plan: matrix, mind map, flow chart etc. The process also needs to be carefully carved such that it integrates multiple theories that have close overlaps. One should have the process directive enough yet not restrictive such that it would be able to encompass varied design functions in its realm.

This review paper is examining three main theories that establish the design processes of renowned architects in the discipline today. The three theories are: Critical Regionalism, Phenomenology and Contemporary Indian Treatise. All the three do have a close connect, there are also architects already using them as background to their designs. Yet there is not a design process or method that has yet been evolved for either of them to address architecture design. Hence the review is meant to study the theories and elaborate on its understandings that can eventually be adopted into developing a design process.

II Critical Regionalism

IIA Alexander Tzonis

Alexander Tzonis began the discussions on Regionalism in the 1980s. He is Professor Emeritus and one of the renowned Theorists in the discipline today. He is also Director of 'Design Knowledge Systems Research Centre' at University of Technology of Delft. His many texts elaborate on the idea of Regionalism. Namely the 'Lewis Mumford's Regionalism' and latest one is 'Architecture of Regionalism in the Age of Globalization: Peaks and Valleys in the Flat World'. First gives a beginning of Regionalism and an insight into Lewis Mumford's argument of being region specific. The second book is Tzonis' take on Regionalism and its dire need in the contemporary globalization of 21st century.

Book 1: 'Lewis Mumford's Regionalism' (Tzonis, 1991) The book named 'Lewis Mumford's Regionalism' (Tzonis, 1991) the idea of Region from its beginning. Lewis Mumford (A historian, philosopher and a literary critic); mentioned the idea of regional context back in 1924 in his text called 'Cities and Stones'. His inclination towards Urban and Regional Architecture brings him to recognize the negative impact of the 'Imperial Beaux Arts' concept, 'The City Beautiful Movement' and other similar capitalist ideas. He claims that these concepts were global masks on the face of the city which was inflicted with disease inside. The sprawling slums would continue to grow, while the capital city would flourish at its cost. The solution proposed by Mumford was 'regional Planning'. Only a planning that would be based on an understanding of the economics, populace, community, industry and the appropriate need of up gradation for the region individually; would lead to a flourishing settlement. This is where the region as an idea was first recognized. It is still far from the Critical Regionalism in individual Architecture; yet it did lead to one in 100 years.

At the time when Bauhaus and International style were celebrated; Mumford shunned their globalization and elitist facade. According to him none of the Modernist movements had the sensitivity of the complete society; they were always the austere and sophisticated types that were indifferent of the surrounding. A possible diversion point was Frank Lloyd Wright's Prairie style that recognized the topography of the site and climate of the place. The horizontal cantilevers, low pitched roofs and central hearth all led to an intentional attempt to merge with its surrounding. Mumford claims that Prairie style was first of its type in the history of Modernization that cared about the 'Sense of Place'.

In his last lecture in the context of war; Mumford says *"Thinking about an international style when we don't have an international society is absurd."* (Tzonis, 1991)

Book 2: 'Architecture of Regionalism in the Age of Globalization: Peaks and Valleys in the Flat World' (Lefavre, 2012)

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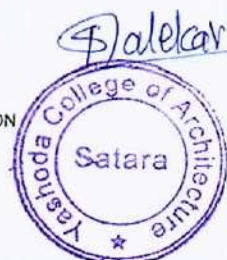


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
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EFFECT OF CLIMATE ON THE MORPHOLOGY OF A PUBLIC BUILDING

Ar. Harshad Raison¹

Ar. Rakhi Begampure²

Dr. Jitendra Singh³



during summers, while more heat during winter according to climatic conditions.

- Variations in roof levels help in gaining daylight and also to minimize the exposed surface.

Case Study 3: CII Center, Hyderabad

- Use of traditional design methods of courtyard and jali to achieve the desired comfort levels in the structure.
- Using the form of the structure in accordance with the climate.
- Balance of morphology and height to width ratio helps to minimize the exposed surface area.

(Source: Authors)

3. Inferences

-Orientation of the building in accordance with the climatic condition's help's in making a building energy efficient.

-Choosing the ideal position of the structural vertical cores with regard to the climate zones may help to modulate building interior temperatures.

-Surface area to volume ratio can help determine the amount of heat gain on broad level.

-Perimeter to Area ratio a subordinate to S/V ratio applicable on two dimensional bodies also helps in determining the ambient shape of the structure to minimise the heat gain.

-P/V and S/V ratio help in determining the effect of climate on the form and shape of the building i.e. building morphology.

-Better ventilation can be achieved through positioning of windows in accordance with climate.

-Effective use of building form with respect to climate helps in curtailing the exposure towards the heat.

-For hot and humid climate, the building must be oriented towards the direction of wind flow to maximize the ventilation, while in hot and dry climates the form of the building should be such so as to reduce the heat gain and for the composite zone building should respond equally to heat gain and loss principles to cater equal amount of heating and cooling during summer and winter respectively.

4. Conclusions

The Form and Shape of a building i.e. building morphology in calculated proportions and sizes does have effect on the performance of a building specific to a particular climate. With the variations in climate in different climatic zone the orientation, shape, form, size etc. of any given structure also varies.

Proper orientation of the form along with the applied principles help in achieving the basic comfort level which are of prime necessity in a public building. The basic design principles in accordance with the climate, inculcated at design stage help in making the building sustainable.

Thus, it can be concluded that, there is a significant effect of climate on deciding a morphology of a building.

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6. References

- BEE Project, U. E.-I., 2009. *Energy Conservation Building Code User Guide*, New Delhi: Bureau of Energy Efficiency.
- UNEP, 2010. *The 'State of Play' of Sustainable buildings in India*, France: UNEP Sustainable Buildings and Climate Initiative.
- TERI, 2006. *The Energy & Resources Institute*. [Online] Available at: <http://www.teriin.org/publications>
- Yeang, K., 1999. *The green skyscraper : the basis for designing sustainable intensive buildings*. New York: Prestel.
- Cheung, C. K., Fuller, R. J. & Luther, M. B., 2005. Energy-efficient envelope design for high-rise apartments. *Energy and Buildings*, Issue 37, pp. 37-48.
- CII, 2009. *Confederation of Indian Industry*. [Online] Available at: https://www.cii.in/CII_Research
- Krishnan, A., 2001. *Climate responsive architecture*. New Delhi: Tata McGraw-Hill Pub. Co.



SUSTAINABLE TOURISM DEVELOPMENT IN INDIA: A CASE STUDY OF MAHARASHTRA REGION



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Abstract:

Tourism is recognized as a fast growing industry. It has potential to transform economies of the country. It has great capacity to create large scale employment. The Indian economy is also undergoing a many transformation. Tourism in India is growing, and it has rich potential of natural resources for tourism such as heritage, scenic beauty and culture. So tourists are attracted to India. There are many tourist destinations in India which contain huge potential of natural resources, if we utilize these potential it will benefit to improve socio-economic relation, employment creation and, infrastructural development of the region.

The paper highlights the importance of the sustainable tourism by outlining the strength and challenges of the Indian tourism industry. Through the paper development of sustainable tourism is also discussed. This study has been done by the primary observation, data collection, articles, reports and over all content, analysis of the secondary data of sustainable strategies.

Keywords: Sustainable, tourism, development





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This is to certify that Dr./Mr./Mrs./Ms. Rakhi A. Bageerapure, Dr. Parag Narkhede of the Institute / Organization YCA has actively participated/presented paper in Two-Days International Conference on "Futuristic, Resilient & Smart Urban Development" sponsored by Savitribai Phule Pune University under QIP and organized by Department of Civil Engineering, JSPM's Rajarshi Shahu College of Engineering, Tathawade, Pune on February 22nd and 23rd 2019.



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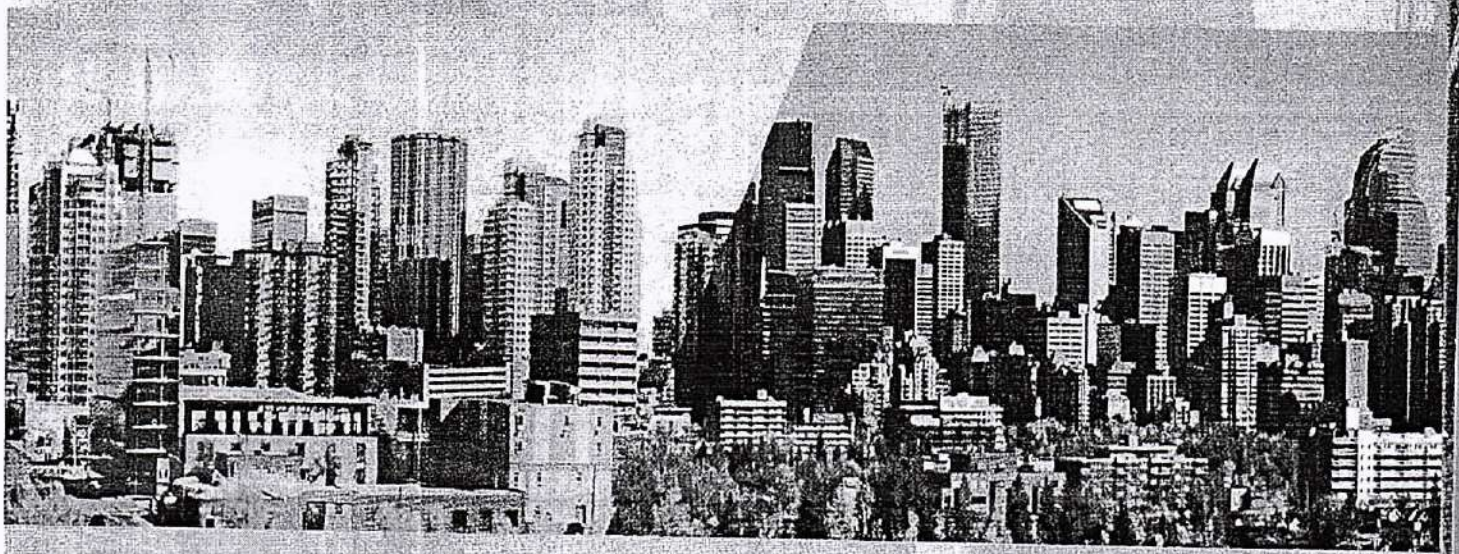


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Experimental Investigation of Granulated Blast Furnace Slag as Fine Aggregate in Concrete

¹S. M. Sarode, ²Prof. U.A. Mahadik, ³Prof. S. P. Belgundkar

^{1,2,3}Dept. of Civil Engineering, JSPM's Rajarshi Shahu College of Engineering, Tathawade, Pune

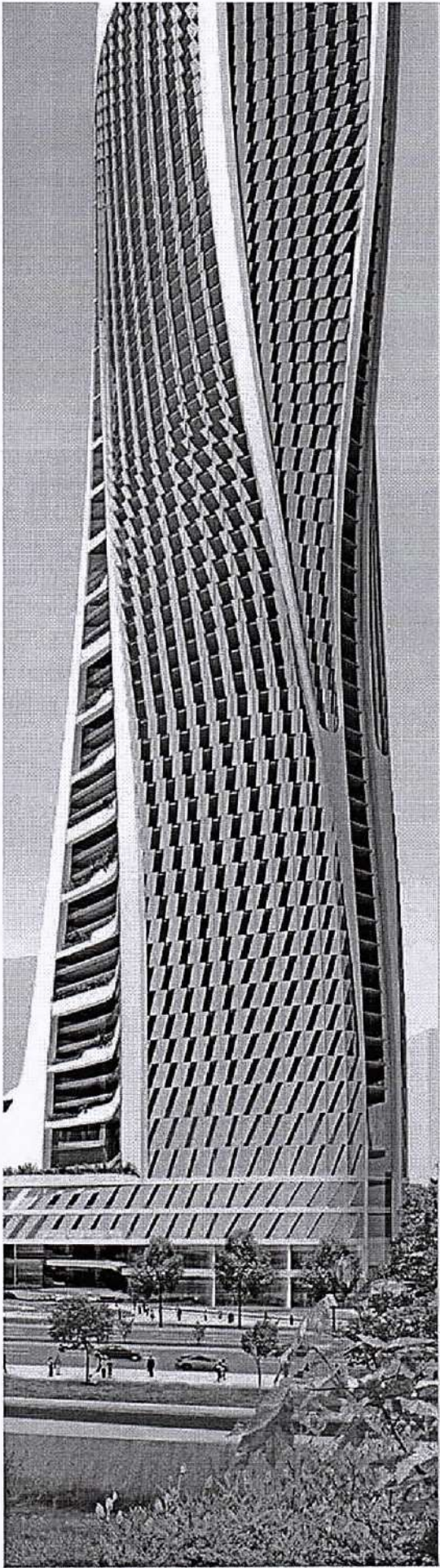
ABSTRACT

Sustainable materials are currently widely considered and investigated in construction engineering research. There are some examples of sustainable research which are being worldwide used as recycled concrete aggregates, coal fly ash, ground clay brick and pervious paver block system. Also the research work has been conducted on fiber-reinforced concrete, a concrete made of a mix of hydraulic cement, aggregates, water and reinforcing fibers. The increasing demand for concrete in the construction has drastically led to reduction of natural river sand which has led to environment damage thereby causing ecological imbalance. The experimental investigation includes the replacement of fine aggregate i.e. natural river sand. This fine aggregate is replaced by granulated blast furnace slag (GBFS). GBFS is a by-product of iron and steel which is produced in a blast furnace while producing iron and steel. It is a solid waste product which is gets dumped. As it is a waste product, instead of getting dumped GBFS can be used as a fine aggregate which will give the environment a great advantage as solid waste management is a main concern all over the world. This experiment includes the use of GBFS partially replacing fine aggregate in a cement concrete. The variation of replacement of natural river sand with GBFS is of 0%, 30%, 40% and 50% for the compression test. For this test twelve cubes were casted using this variation to check the compression strength of concrete. Further natural river sand was replaced by GBFS in a variation of 25%, 30% and 35%. This variation was carried out for testing of concrete properties i.e. compression, tension and flexure. For compression test, nine cubes were casted. The twelve cylinders were prepared for 0%, 25%, 30% and 35% to conduct split tensile test. For flexure test, twelve beam specimens were casted for 0%, 25%, 30% and 35%. The maximum compression stress, tensile strength and flexure strength is obtained at 30% replacement.

Keywords-GBFS, GGBS, Blast Furnace Slag, Relative Humidity, Fly Ash, Target Compressive



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Feasibility Study on Reduction of Energy Usage, Till Construction Completion of Residential Projects at Satara

Snehal Shedge, Laxmi Salgia
DY Patil College of Architecture, Akurdi, Pune
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Abstract : Energy usage in the building industry has effectively and successfully undergone various improvements but largely it is focused over the lifespan of the project and the energy efficiency in the construction process is evidently ignored. Hence, this paper focuses on finding out and understanding the attitudes, approaches, inclinations, barriers behind improvising the energy efficiency in the construction process for residential projects at Satara. A questionnaire survey was conducted amongst the construction process decision makers and onsite influential personnel to elicit information pertaining to energy usage. The findings of this study focus on key processes to improve efficiency, will guide the decision makers as well as policy makers to channelize attention and bridge the gap towards energy usage during construction.

Key words: Energy, Construction, Residential, Efficiency.

I. INTRODUCTION

Construction projects have undergone lot of innovations to improve the quality, costing and also the end product throughout the lifecycle of the project. These innovations have increased the use of energy in different forms. Green technological innovations and applications have permitted us to reduce this use of energy to a considerable extent but these are majorly focused on the energy use after the completion of project. Residential sector for India alone, has predicted the rise of more than twice increase in floor area compared to the current residential floor area till 2060 [v] (UN Environment and International Energy Agency, 2017). With the recent signed Paris agreement there are increased pressures on the construction industry to reduce usage of energy in Construction process [vi]. Given the potential quantum of rise of residential sector, the Construction energy requirement is going to increase more than twice of today's requirement correspondingly increasing pressure on energy use reduction in construction process (United Nations, 2017).

Green Building Certification Agencies like LEED & GRIHA are more focused on the energy usage after the construction

process so the increase in energy usage and thereby carbon footprint of any building by just the process happening on construction site is ignored by many professionals.

Also, awareness about these facts, quantum of energy involved, implications and measures for energy usage during construction is somewhere lacking in the construction professionals.

There is a remarkable increase in low carbon construction projects across India. This progress is important for low carbon construction efforts and it is significant for society and specially for construction companies. So to further develop low carbon construction practices, the industry has to be more innovative with how it uses natural resources and current sources of energy in all areas of the construction site.

II. OBJECTIVES:

- To find if the awareness of energy efficiency exists in the professionals working on site
- To what extent the process on their respective sites are formulated to make them energy efficient, and identify the barriers in doing so- if any.
- Knowingly or unknowingly do the professionals follow any streamlined processes
- Policy suggestions if any that can be derived

III. SCOPE

- The area of study is confined to the construction process.
- Although the direction of this study is more directed towards the sustainable approach, the emissions from the construction processes are not incorporated in this study.

IV. METHODOLOGY

Following steps approach is used:

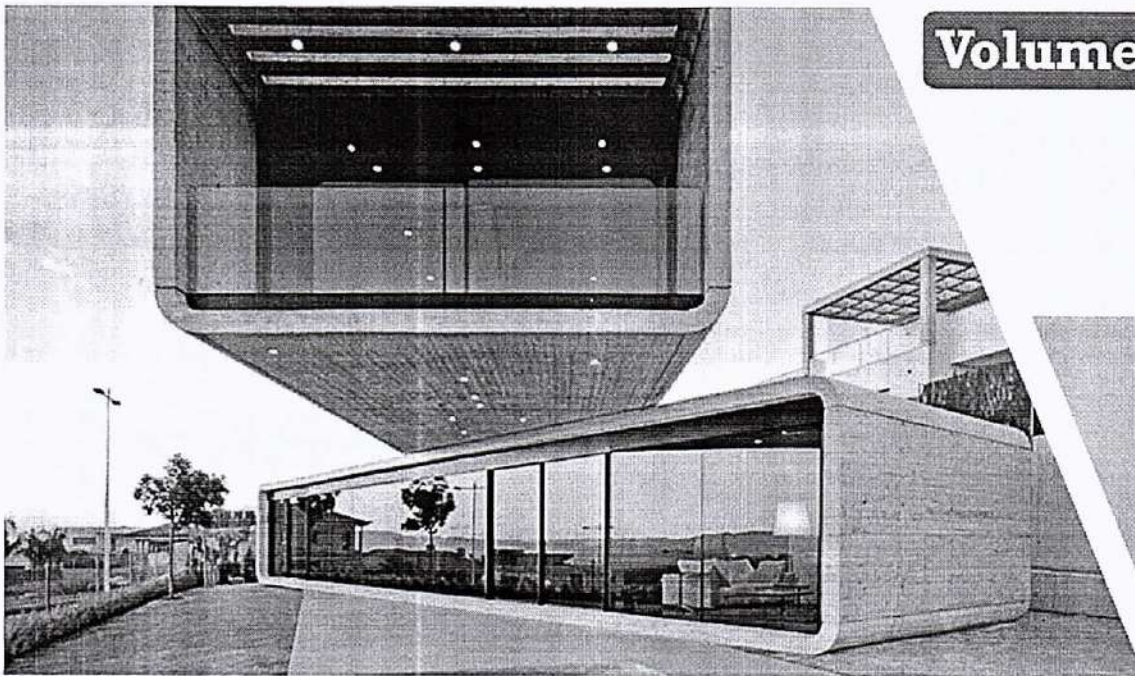
- Identification of types of activities and energies used on the site.
- Understand the basic energy saving processes or approaches that can be used on construction sites
- Formulation of Questionnaire for construction professionals to find the relevant approaches,

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A Study on the Maintenance Cost of the Apartment Housing

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Abstract:- Housing is a fundamental need for everyone. Houses are items that draw attention to themselves due to their attributes. As the population and income of the population has grown, so has the demand for housing. As a result, apartments have been constructed to meet people's needs while lowering the amount of land used for residential development. Year after year, the building's maintenance costs rise. Poor or non-maintenance is attributed to rising costs and limited funds. It is vital to identify the elements that influence the cost of apartment resident maintenance in order to ensure that the cost of apartment resident maintenance may be reduced. The scale of apartment housing must be planned, including the number of households, building space, and building type. As a result, it would be advantageous to anticipate the cost while taking into consideration various maintenance features. They include things like floor space, the number of households, heating type, site area, and other maintenance aspects. The ultimate goal of this study was to investigate, assess, and manage the risks associated with determining what factors influence maintenance costs.

Keywords: Maintenance Costs Factors, High rise buildings, Building Owners, Tenants and Types of Maintenance

I. INTRODUCTION

In the field of housing and infrastructure development, Apartments used to be modest living spaces with basic utilities like housekeeping, water, and common lighting. When housing became more vertically oriented with high-rise buildings, lifts were added to the list. Generators were added afterwards due to lack of consistent power supply. Because of the society's tiny size, all connected charges were rigorously limited and closely regulated. (Devanathan, 2013) Within the gated community/ housing society/ apartment complex, we now enjoy a new lifestyle with a swimming pool, gym, club house, party hall, library, guest bedrooms, Jacuzzi, Sauna, landscaped gardens, tennis courts, cricket pitches, golf courses, and other amenities (hence forth referred to as housing society). The builders and developers entice us with an endless list of lifestyle amenities. It appears that life in such a place is a paradise. When you buy an apartment with some of these features and begin to live there, paradise appears to be a mirage. Poor or non-maintenance is attributed to rising costs and limited funds. Such housing societies (or resident welfare associations) have an administrative body (the managing committee - MC) that is constantly collecting maintenance and paying dues. There is a drastic increase in the productivity of maintenance when we institute centralized

and rationalized apartment building maintenance system in place of traditional maintenance. There is no time set aside to analyze costs or investigate cost control. Many MCs have succumbed to sloppy budgeting, rash decisions based on a lack of cost information, and a lack of scientific procedures to identify, allocate, apportion, and control expenses. It's always back to square one, no matter who is in charge of the MC.

II. FACTOR THAT AFFECTS THE COST OF APARTMENT MAINTENANCE

Buildings must be properly maintained by someone with the necessary abilities. The term "maintenance" can be interpreted in a variety of ways. Maintenance is "any work done to maintain or restore any facility," for example, every portion of a site, building, and everything associated to a building must be up to code. Aside from that, maintenance is the effort required to restore and maintain a damaged facility to current standards. As a result, the goal of building maintenance is to keep a structure in good working order and in a condition that is adequate for its intended use. Building maintenance is a mix of technical and administrative actions aimed at ensuring that the item and all parts associated to the building meet the appropriate standard conditions in order to execute the desired function. As a result, the ultimate goals (Azlan, 2009) of building maintenance are to preserve the value of the investment, to ensure that buildings are in acceptable condition and meet the required standard, to present a good appearance of the building, and to conserve the building's historical and architectural values. The total expense or budget set aside to maintain the building's condition is referred to as the maintenance cost. Direct costs such as material, labour, plant, and tool used to maintain the building are also included in the maintenance cost. Meanwhile, high-rise building maintenance costs include indirect costs such as management and administrative employees, as well as overhead costs. One of the biggest housing expense components, is maintenance and operation. Maintenance and operation of buildings often contribute one-third to half of the entire cost of maintenance work, depending on the kind of residential unit such as condominium, apartment, flat, or other. (Rydell, 1970)The cost of maintaining a high-rise residential structure is influenced by a number of factors. Building characteristics, tenant factors, maintenance

The Significance of Cultural Tourism to Sustainable Development with Special Reference to the Kolhapur City

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Abstract—The Indian has significant historical background. Culture and heritage are accompanying to history of Indian civilization. Indian has rich cultural and heritage significance. As tourism is one of the fastest growing industries. So, the potential of cultural and heritage tourism can be utilized for tourism development.

The cultural, tradition, art, architecture, religion and other social structure of the region have substantial impact development region. The tangible and intangible cultural aspect play important role in sustainable development and tourism growth of the region.

It is identified the previous studies focused on sustainable development in tourism but did not focus on cultural tourism, so in this study it has been considered.

The regions issues and challenges of cultural tourism has been analyzed. For the study the research methodology used is integrated an inductive design through literature study in order to attain qualitative data.

The present study is about the cultural tourism and its significance of the region. The various intangible and tangible cultural aspects are studied. The utilization of cultural resources of the region and its impact on the sustainable development of the region.

Keywords—Cultural tourism ,Sustainable development

I. INTRODUCTION

Tourism

Tourism represents the movement of people from one destination to another destination which is an economic, social and cultural phenomenon. It is a temporary movement of people to an outside destination or place. (prof yogesh hole, 2019)

Cultural tourism

According to the definition adopted by the UNWTO General Assembly, at its 22nd session (2017), Cultural Tourism implies "A type of tourism activity in which the visitor's essential motivation is to learn, discover, experience and consume the tangible and intangible cultural attractions/products in a tourism destination. These attractions/products relate to a set of distinctive material, intellectual, spiritual and emotional features of a society that encompasses arts and architecture, historical and cultural heritage, culinary heritage, literature, music, creative industries and the living cultures with their lifestyles, value systems, beliefs and traditions".

Cultural tourism in India

India's cultural tourism, because of its unique heritage cultures and climatic features, India has become one of the world's popular tourist destinations, attracting a great number of people each year. Tourism has grown-up intensely over the last 25 years, and it is one of the most notable elements driving economic development. India is the among country that offers a variety of tourism options. By presenting India as the ultimate tourist destination, the Indian government hopes to increase revenue from the tourism business. The religious ideas and philosophical tendencies of the time affected Indian art. The temples in the south, as well as the caves of Ajanta, Ellora, and Khajuraho, provide witness to the aesthetic quality reached by Indian artists, sculptors, and architects in those costly and spiritual reawakening on visiting these temples. The consistency of Indian music's development is noteworthy. In India, there are three primary classical dance systems: Baranatyam, Kathakali, and Maipuri. Other notable dances include Andhra Pradesh's Kuchupudi, Orissa's Odissi, and Kerala's Mohiniattam.

Maharashtra is third-largest state in India's by area and population. Domestic tourist arrivals in Maharashtra have increased by around 7.2 percent, while foreign tourist arrivals in India have increased by 20.8 percent. Along with the Konkan area, it boasts a 720-kilometer-long coastline. There are various hill stations in the Western Ghats and the Sahyadri mountain range. With its deep woods, Maharashtra's Vidarbha region is home to various wildlife sanctuaries and environment parks. Historic cave temples, unspoilt beaches, ancient forts and monuments, woods and wildlife, unique hill stations, pilgrimage centres, and a long legacy of festivals, art, and culture abound throughout Maharashtra

II STATEMENT OF THE RESEARCH PROBLEM

It has been determined that the most of the study carried out on cultural tourism only few aspects are considered and focused on development of infrastructure. The policy and strategies by the government is not analyzed in the previous study which substantial part has to consider.

However, the concern about to utilize the fullest potential of cultural tourism. And to focused on traditions, culture and tourism of the region and relationship is developed between them. So there is need to conserve the culture, traditions of the region and use it for economic, social benefit of the society and local community development.

Hence the study pursued to significantly provided a various cultural and traditional aspects of the region and analysis of the need for sustainable development policies for cultural tourism for the region. Further significant solutions will be provided for the sustainable development of cultural tourism, which will be





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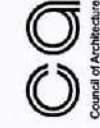
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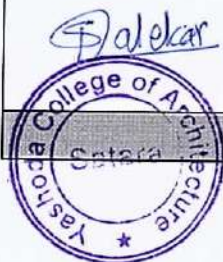
National E-Conference (NCA)

'Adaptation-Endeavouring a Foreseeable Future'

(14th & 15th January, 2022)



Day 1: Friday; 14 th January, 2022		
Session Time	Topic of Presentation/event	Paper Presenter
9.00 a.m.-9.10 a.m.	INAUGURATION CEREMONY	
9.15am-9.25 am	Address by The Convener	Dr. Banani Banerjee
9.25 a.m.-9.35 am	Address by COA representer	Ar. Habib Khan
9.35 am-9.45 am	Address by PCERF president	Ar. Kembhavi
9.45 am- 9:55 am	Address by AESA president	Ar. Kanvinde
9.55 am-10.00am	Introduction of Dr. Amita Sinha	Ar. Ketaki Badage
10.00 am- 10.30 am	Address by the Key Note Speaker Gardens and landscape of Uttarayan in Shantiniketan	Dr. Amita Sinha
10.30 am- 10.45 am	Question & Answer Session	
10:45am-12:00 noon	SESSION 1: Architecture and Built Environment	
1 hr. 15 min	Form Flexibility	Ar. Shivani Gaikwad
	Post occupancy study of human comfort in a traditional house as against a newly designed modern house	Ar. Mahesh Bangad & Ar. Siddhi Joshi
	Exploring space ergonomics as Design Approach for In Situ Rehabilitation of Kebele Houses	Ar. Rajendra Kopil Kunwar
	Parameters for combination of contemporary and traditional roof design for residential building in hot and dry climatic region in India	Ar. Saniya Kulkarni & Prof. Dr. M. N. Chandrashekar
	Question & Answer Session; Summary by the Session Chair	
12:00 noon -1.15 pm	SESSION 2: Architectural Conservation	
1 hr. 15 min	Adaptation of a new land after partition in Bengal and Adaptability of the forced migrants: Influence on social, cultural and spatial transformation of Kolkata	Dr. Banani Banerjee
	Ayodhya – Study of Physical and Social Fabric of a Cultural Sacredscape	Asmitha R.
	The significance of cultural tourism to sustainable development with special reference to the Kolhapur city	Ar. Rakhi Begampure
	Tracing the Evolution of Kanheri Buddhist Cave complex, Salsette, Maharashtra	Ar. Poorva Patil
	Question & Answer Session ; Summary by The Session Chair	
LUNCH BREAK (1:15 pm -2:00 pm) Video :- Kopai and Khoai Landscape stories of Shantiniketan		Ar. Kailashpati Maurya, Upama Sen
2:00pm -3:15pm	SESSION 3: Landscape and Environment	
	Environmental Sustainability in Interior Design	Ar. Shahna Haneef
	Impact of Pandemic on Visitation of Children to Community Open Spaces	Ar. Dhruv Chandwania
	A Study of Eco-Tourism potential in Maharashtra	Prof. Gayatri Dhananjay Jadhav
	Impact of anthropogenic activities on urban ecology : A case of Aurangapura stream in Aurangabad (MS)	Prof. Pranita Pranjale and Ar. Chinmay Pade
	Question & Answer Session ; Summary by The Session Chair	
3:15 pm - 4:30 pm	SESSION 4: Architectural Pedagogy	
1 hr. 15 min	Widening the boundaries of mapping the cultural heritage of vernacular settlements in architectural education	Ar. Catherine Selvaraj, Arulmalar Ramaraj , Sanghavi Venkata Varadan
	Phenomenology In Architecture: A Pedagogical Exploration	Ar. Fatema Kabir, Dr. Anurag Varma & Ar. Jayashree Deshpande
	Inducing Curiosity in the Architectural Design process	Ar. Mandar Vishnu Dhuri
	Integrating traditional knowledge systems into the architectural curriculum – a pedagogical approach	Ar. Sneha Bendre, Ar. Amol Holey
	Question & Answer Session; Summary by The Session Chair	
Day 1 End		



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14th & 15th January 2022

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Awarded to Ar. Rakhi Begampure
for Research Paper titled The significance of cultural tourism to sustainable development with special reference to the Kolhapur city Presented and Participated in the conference.



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