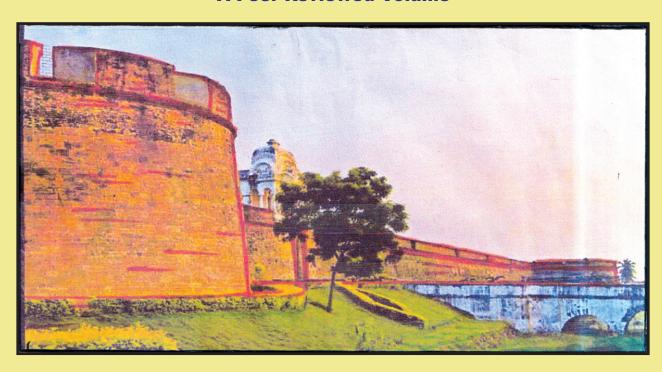
#### Researches

in

# EASTERN COASTAL FORTS, MONUMENTS AND ISLANDS OF INDIA

(Ecology, Landscape, Architecture, Archaeology)

## ECOLARCH SERIES A Peer Reviewed Volume



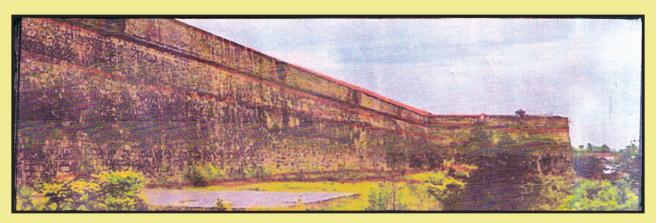
Publ. Controller
Dr. (Ar.) N. Mehrotra,
Head. Deptt. of Architecture
Gautam Buddha University
Greater Noida

# Chief Editor Prof. Ar. (Dr.) D. Sanyal M.Arch. PhD. Deptt. of Architecture National Institute of Technology (NIT) Raipur, (C.G.)

Editor Vol.1
Prof. (Dr.) S.S. Bhadauria
Head, Deptt. of Geology
Govt. NPG College of Science
(Pt.R.S.U.) Raipur (C.G.)

#### AUTHOR Dr. H.D. DIWAN

(Remote Sensing) M.Tech (NIT), Ph.D.
PGDRS, IIRS (Dehradun)
M.A. (History), CDM. CHR (IGNOU) New Delhi



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This volume of ECOLARCH Series includes Ecology, Landscape, Architecture and Archaeological aspects of Eastern coastal forts, monuments, Religious Temples, Sea Islands, Deltaic Islands, its heritage structures in form of Research Articles duly peer reviewed by subject Experts. This volume is unique one because most of recent information and discussions of New Trends of scientific and Technological interpretations of Physical domain of natural environment and Man made historical structures included by utilizing the Satellite Remote Sensing Data Imagery and correlated with existing Historical, Architectural and Archaeological facts. I hope it will be useful for Researchers/Professors/students/ Academicians related to the subject fields.

> Prof. (Dr.) Debashis Sanyal Chief Editor, ECOLARCH Series Vol. I

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#### VOL-I

Publ. Controller	Chief Editor	Editor Vol. I	
Dr. (Ar.) N Mehrotra,	Prof. Ar. (Dr.) D. Sanyal	Prof. (Dr.) S.S. Bhadauria	
Deptt. of Architecture,	M.Arch. PhD., Dean. Dept. of Architecture	Head, Deptt. of Geology Govt. NPG College of	
Gautam Buddha	National Institute	Science (Pt.R.S.U.)	
University	of Technology	Raipur (C.G.)	
Greater Noida	(NIT) Raipur, (C.G.)	• , ,	

### AUTHOR **Dr. H.D. DIWAN**

(Remote Sensing) M.Tech, (NIT), PhD.
PGDRS, IIRS (Dehra Dun)
M.A. (History), CDM. CHR (IGNOU) New Delhi



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Dr. H. D. Diwan

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# Dedicated To LORD RAMESHWARNATH (PUMBAN ISLAND) (RAM SETU - DHANUSHKODI)

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#### **PREFACE**

India is a rich country in Tangile and Intangile Heritages since it possess Super Infrastructures in form of physical assets e.g. Forts, Palaces, Monuments, ancient civilized settlements whereas religious, cultural and social stratifications are Inherent Intangile properties, Likewise, the diversity exists on physiographic conditions of terrains, landscape and ecological zones of environment in Indian territories. For defensive and protective infrastructures, the site selection of Forts, Palaces locations of hilly rugged terrains were preferred by the rulers of state or Reign in Ancient and Medieval India. The details about mainland and continental inland based structures are available in many literatures, Archives, Records, Gazetteers, Govt. Reports etc. A little information known about coastal segment, Ecological conditions of Sea Shore, stability and sustainable construction of huge infrastructures. The coastal region is mainly affected by eco-environment of Sea water, waves, and geomorphic processes which is dynamic in nature. The site of coastal margins, Islands, deltaic zones require various protective measures and conservation practices to retain the huge structures stable and intact in long duration of time span. In volume I of ECOLARCH Series, the Eastern Sea Coastal Sea shore from Gangetic Delta to southern tips of India, Kanyakumari distt. Vivekananda Rock Island Monuments has been illustrated inform of Research Article Chapters. (I to VII) The Sea Islands Rameshwaram Pamban and Vivekananda Rock Islands are evolved by different geologic processes. The religions Monuments built on Islands considered Ecological and geomorphic characteristics of the site region. It is described in new trends of Satellite Remote Sensing data interpretation with spatial and temporal analysis. (Chapter I and Chapter II) The Tamralipta was an Indian Ancient Port (IAP) has been studied for Historical Religious Monuments and Rajbari Palace. The ancient trade route (ATR) from copper Mines of

Mosabani to south Asian Countries at present buried underneath the fluvial plains of Gangetic Deltaic zone. The Religious monument Baghambhima Temple (10th Century AD) still survive and represents Traditional Bengal Architecture (Chapter III) The Manora fort lies on Coastal Sea Beach Landscape of Chinnamanai Coast, Bay of Bengal, Thanjavur distt. TN. The eight storied hexagonal Minaret was built by Maratha feudatory Surfoji II (1815 AD) as a Victory Tower. (23 m height) It has been renovated after disaster attack by Tsunami. The Dravidian Architecture style adopted for fort and Hindu religious monuments found in the premises of fort wall precincts (Chapter IV). The Moyanagarh fort and Rajbari built in Medieval period by Dharma King Lau Sen in 10th Century AD. It shows the double concentric water moat in square shape, built for protective measure displays Traditional Orissan and Bengal Architecture of fortification (Chapter V). The Baramati fort and Palace of Cuttack has tremendous Cultural heritage value constructed on deltaic zone of Mahanadi catchment in Orissa. (Chapter VI). The forts and Temple monuments of Vizianagaram city of Andhra Pradesh reflects Traditional Indian style of Architecture. (Chapter VII). All the seven Chapters has been peer reviewed by subject experts in the fields of Architecture, Indian History, Archaeology and Geosciences, it persist the academic values of matters included in this book by the author. The subject matters consulted have been properly acknowledged and cited in the references. I hope that the volume is considered to be of utmost value to Academicians/ Researchers/ Professors engaged in the related fields.

Edition, 2023

CHIEF EDITOR
ECOLARCH Series Vol - I
Dr. (Ar.) Debashis Sanyal
Deptt. of Architecture
(NIT) Raipur

ECOLARCH Series
Know about
Chief Editor
Ar. (Dr.) Debashis Sanyal



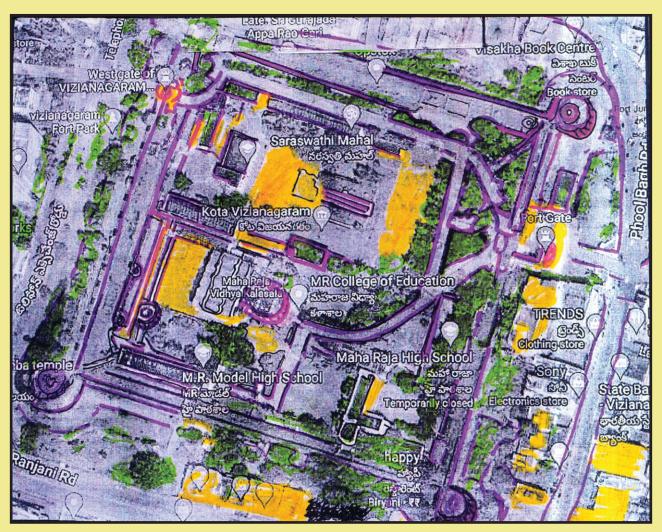
Architect (Dr.) Debashis Sanyal, M.Arch., PhD. has more than 38 years research and teaching experience in Architecture discipline in National Institute of Technology Raipur. He is individual Member of International Council for Research and Innovation in Building and Construction (CIB), Netherlands and Council on Tall Buildings and Urban Habitat, USA. His active research areas of interest are Historical forts, Conservation and preservation of Ancient Indian monuments, Self Efficient Housing, Eco-cities, Super tall Intelligent buildings, industrialized mass housing, Indoor Air quality. He was awarded justice Mahapatra Award for research by Rotary Club of Raipur Central in 1995, A3F best teacher award from A3foundation Chandigarh and award for valuable contribution in Engg. & Technology by The Institution of Engineers (India) Chhattisgarh state center in 2019. Till date he has published 36 research papers in international journals and presented 66 research papers in National/international conferences by visiting 27 countries.

Know about Publ. Controller **Ar. (Dr.) Nirmita Mehrotra** M.Arch., Ph.D.



Urban Planning, Disaster Management, Indian, ancient Township Architect, Dr. Nirmita Mehrotra,

Head, Deptt. of Architecture & Planning, Gautam Buddha University, Greater Noida has varied professional and Teaching experiences in Architecture Discipline in India and Abroad. She is continuously published about two dozen Research papers and Articles in International Journals and participating the Academic conferences of National and International Levels viz, SPA Delhi, Horizon Europe, India, China America institute are ups, prof. school, USA.





Know about .....

Prof. (Dr.) S.S. Bhadauria

Head Deptt. Of Geology
Govt. NPG College of
Science, (Autonomous)
Raipur, C.G. State, India
Prof. (Dr.) S.S. Bhadauria, M.Tech.,
Ph.D. is an eminent teacher of Geology
and researcher for three decades. He has
carried out extensive researches in the
field of Granitic Terrains of Bastar

Region and a life member of Society and Associations, IAH, IWRS Roorkee etc. He is also a recipient of National Scholarship and Talent, got meritorious positions during his graduation and Post Graduation studies in Pt. RSU., and still continuing participation in Research publications and academic activities at National and international levels. He has published more than 15 research papers in National and 35 International Research Journals.



