

SURAT - TUGAS

Nomor: 614-D/2674/FT-UNTAR/VII/2020

Dekan Fakultas Teknik Universitas Tarumanagara, dengan ini menugaskan kepada Saudara:

Nafi'ah Solikhah, S.T., M.T.

Untuk melaksanakan **Publikasi Hasil Penelitian** dengan data sebagai berikut:

Judul Artikel : Ethnic Tourism and Sustainable of Vernacular Settlement in Cibeo Village, Baduy Dalam
Pada : IOP Conference Series: Earth and Environmental Science :
Volume 452 (2020) 012021
Indexed by Scopus
<https://iopscience.iop.org/article/10.1088/1755-1315/452/1/012021>
Waktu : Semester Genap 2019/2020

Demikian Surat Tugas ini dibuat, untuk dilaksanakan dengan sebaik-baiknya dan melaporkan hasil penugasan tersebut kepada Dekan Fakultas Teknik Universitas Tarumanagara.

08 Juli 2020

Dekan



Harto Tanujaya, S.T., M.T., Ph.D.

Tembusan:

1. Kaprodi. Sarjana Arsitektur
2. Kasubag. Personalia
3. Arsip

PROGRAM STUDI :

- Sarjana Arsitektur, Magister Arsitektur, Sarjana Perencanaan Wilayah dan Kota, Magister Perencanaan Wilayah dan Kota
- Sarjana Teknik Sipil, Magister Teknik Sipil, Doktor Teknik Sipil
- Sarjana Teknik Mesin, Sarjana Teknik Industri, Sarjana Teknik Elektro

Jl. Letjen. S. Parman No.1 - Jakarta 11440

P : (021) 5663124 - 5672548 - 5638335

MPWK : (021) 56967322, MTS : (021) 5655801 - 5655802, DTS : (021) 56967015 - 5645907

F : (021) 5663277, MTS : (021) 5655805, MPWK : (021) 5645956

E : ft@untar.ac.id

www.untar.ac.id

**FRIENDLY CITY
INTERNATIONAL CONFERENCE 5**

"Enhancing Culture, Community and Environment"

CERTIFICATE

This is to certify that

N Solikhah

With paper's title

Ethnic tourism and sustainable of vernacular settlement in Cibeo Village, Baduy Dalam

to contribute as a

AUTHOR

at Friendly City International Conference 5 (2019)
held on 12th September 2019 at Grand Aston City Hall Hotel,
Medan - Sumatera Utara, Indonesia

Chair of Friendly City
International Conference 5



Ir. Nurlisa Ginting, M.Sc., Ph.D., IPM

Rector of
Universitas Sumatera Utara



Prof. Dr. Runtung Sitepu, S.H., M.Hum



IOP Conference Series: Earth and Environmental Science

Country United Kingdom - [IIR](#) [SJR Ranking of United Kingdom](#)

Subject Area and Category [Earth and Planetary Sciences](#)
[Earth and Planetary Sciences \(miscellaneous\)](#)
[Environmental Science](#)
[Environmental Science \(miscellaneous\)](#)

Publisher [IOP Publishing Ltd.](#)

Publication type Conferences and Proceedings

ISSN 17551315, 17551307

Coverage 2010-2020

Scope The open access IOP Conference Series: Earth and Environmental Science (EES) provides a fast, versatile and cost-effective proceedings publication service.

[Homepage](#)

[How to publish in this journal](#)

[Contact](#)

[Join the conversation about this journal](#)

18

H Index



IOP Conference Series: Earth and Environmental Science

Not yet assigned quartile

SJR 2019

0.18

powered by scimagojr.com

Show this widget in your own website

Just copy the code below and paste within your html code:

``

PAPER • OPEN ACCESS

Conference Logo

To cite this article: 2020 *IOP Conf. Ser.: Earth Environ. Sci.* **452** 011003

View the [article online](#) for updates and enhancements.



PAPER • OPEN ACCESS

| Preface |

To cite this article: 2020 *IOP Conf. Ser.: Earth Environ. Sci.* **452** 011001

View the [article online](#) for updates and enhancements.

[PREFACE]

Introduction

The 5th Friendly City International Conference (FCIC 5), organized by Architecture Department, Universitas Sumatera Utara, Medan - Indonesia is considered to be a media for research results and experience exchange in exploring and developing ideas of friendly city in various aspects and perspectives and also as synchronization media between academic research and practical application in solving urban problems, in developing countries.

A friendly city is not just demonstrated by a good and appropriate infrastructure and space but very dependent on how communities are involved and their needs are met. The needs of the communities can vary from place to place, depending on the environment, culture and traditions. The interconnectedness of culture in the development of the city, is considered not just as a "patch", but it should be integrated comprehensively. UN Habitat stressed the importance of culture by "re-humanizing" urban environment. Further, it must increase social cohesion, counter segregation (social and spatial) and uneven distribution of wealth, and aim for more equitable distribution and access to urban resources and more integration and connection among residents.

With these goals in mind and continuation of friendly city international conferences series, the 5th Friendly City International Conference (FCIC 5) invite academics, researcher, practitioner, observers and all those concerned participants for a better city life, to jointly express and exchange ideas and experiences. The conference will focus on the issues of community, culture and environment to achieve a better city sustainability.

A forum for discussion of the friendly city has ever seminar on the *International Seminar: Towards a Friendly City*, as part of One Decade Anniversary of Architecture at the Universitas Sumatera Utara November 2001; *International Seminar: Urban Development Management for Friendly City* in 2003; *International Seminar: Creating Urban Architecture for a Better Life* in 2011; and *International Seminar: From Research to Implementation for Better Sustainability* in 2017. As a continuation of the seminar, Architecture Department of Architecture, Faculty of Engineering, Universitas Sumatera Utara, cooperate with the government of Medan intends to organize *International Seminar on Friendly City: Enhancing Culture, Community and Environment*.

The seminar aims to collect a variety of positive thoughts about the management of developing friendly city, especially to apply the concept to the real problems of urban in various parts of the world today. For that much needed donations thoughts and experiences of practitioners of government that will be combined with conceptual theories by experts. Thus it is expected will be obtained a more comprehensive and applicable problem-solving framework.

The topics that available on the conference are:

1. Architectural Theory and Critic
2. Building Technology
3. Development Studies
4. Economic Growth and Development
5. Heritage and Built Environment



6. Human and Society
7. Organization and Management
8. Physical Environment
9. Quality of Life
10. Spatial Change and Geographic Information Technologies
11. Sustainable Built Environment
12. Town Planning
13. Urban Design

General Purpose

1. As a media for research results and experience exchange in exploring and developing ideas of friendly city in various aspects and perspectives.
2. For media synchronization between academic research and practical application in solving urban problems, particularly in Indonesia and developing countries.

Keynote Speakers

1. **M. Nawawiy Loebis**; Professor of Architecture at the Universitas Sumatera Utara, Indonesia. An expert in the field of Architecture Theory and Critiques in Architecture.
2. **Marco Sala** Architect; Professor of Architecture Technology at the Università Degli Studi Firenze and Director of the European Master's Degree in Sustainable Design.
3. **Badaruddin Mohamed**; Professor of Architecture at the Universiti Sains Malaysia. An expert in the field of Tourism Planning and Environmental Planning.
4. **Antonella Trombadore**; Doctor of Architecture Technology in Università Degli Studi Firenze. An expert in the field of Energy Management in Architecture.

Participants

1. Participants : 300 people
2. Abstracts Contributor : 220 papers
3. Such as:
 - Academics; Researchers, Lecturers, Students
 - Bureaucrats / Government
 - Business Person

- NGOs
- Practitioner / Professional Architectural Field
- Practitioners / Town Planning Professionals
- Practitioners / Business Professionals

Conference Venue and Schedule:

Date : Thursday, 12 September 2019

Place : Grand Aston City Hall Hotel and Serviced Residences Medan

Jl. Balai Kota No. 1 Medan 20112 Sumatera Utara – Indonesia

Schedules

Abstract Deadline	: 8 April 2019
Extend Abstract / Late Charges	: 9 – 15 April 2019
Abstract Acceptance Announcement	: 29 April 2019
Full Paper Deadline	: 25 Juni – 1 Juli 2019
Extended Full Paper / Late Charges	: 2 – 7 Juli 2019
Full Paper Acceptance	: 16 August 2019

Social Media and Contact Person FCIC 5 – 2019:

Instagram	: 5fcic
Twitter	: @5fcic
Facebook Page	: Friendly City International Conference
Phone / WhatsApp	: +62-853-6122-1267 (Dicky) +62-831-9383-4377 (Aya)

PAPER • OPEN ACCESS

Peer review statement

To cite this article: 2020 *IOP Conf. Ser.: Earth Environ. Sci.* **452** 011004

View the [article online](#) for updates and enhancements.

Peer review statement

All papers published in this volume of *IOP Conference Series: Earth and Environmental Science* have been peer reviewed through processes administered by the proceedings Editors. Reviews were conducted by expert referees to the professional and scientific standards expected of a proceedings journal published by IOP Publishing.



PAPER • OPEN ACCESS

| Committee |

To cite this article: 2020 *IOP Conf. Ser.: Earth Environ. Sci.* **452** 011002

View the [article online](#) for updates and enhancements.

| COMMITTEE |**Organizing Committee**

1. Chairman : Ir. Nurlisa Ginting, M.Sc., Ph.D, IPM (USU)
2. Co-chairman : Dr. Eng. Himsar Ambarita, S.T., M.T. (USU)
3. Honorary chair : - Prof. Dr. Runtung Sitepu, S.H., M.Hum (Rector – USU)
- Drs. Mahyuddin K. M. Nasution, M.IT., Ph.D (Vice Chairman in Research, Community Services and Cooperation – USU)
4. Member : - Beny O. Y. Marpaung, S.T., M.T., Ph.D, IPM (USU)
- Ir. Dwira N. Aulia, Ir., M.Sc., Ph.D, IPM (USU)
- Wahyuni Zahrah, S.T., M.Sc. (USU)
- Hilma Tamiami Fachrudin, S.T., M.Sc., Ph.D (USU)
- Amy Marisa Lubis, S.T., M.Sc., Ph.D (USU)
- Ir. N. Vinky Rahman, Ir., M.T. (USU)
- Dicky Andrea. S.T., M.T (USU)
- Aya Maharani, S.T., M.Arch (USU)

Scientific Committee

1. Prof. Ir. M. Nawawiy Loebis, M.Phil., Ph.D (Universitas Sumatera Utara)
2. Antonella Trombadore, PhD. (Università degli Studi di Firenze, Italia)
3. Prof. Marco Sala (Università degli Studi di Firenze, Italia)
4. Prof. Giuseppe De Luca (Università degli Studi di Firenze, Italia)
5. Vanni Puccioni (Università degli Studi di Firenze, Italia)
6. Prof. Badaruddin Mohamed (Universiti Sains Malaysia)
7. Prof. Dr. Ir. Nor'Aini (Universiti Sains Malaysia)
8. Prof. Dr. Kausar Hj. Ali (Universiti Sains Malaysia)
9. Prof., Ar., Dr. Julaihi Wahid (Universiti Malaysia Sarawak)
10. Dina C. Magnaye, Ph.D, EnP (University of The Philippines)
11. Dr. Yenny Rahmayati, MSHD&M, B.Eng (Prince Sultan University - Saudi Arabia)
12. Dr. Edward Halawa (Charles Darwin University - Australia)
13. Delik Hudalah, ST, MT, M.Sc., Ph.D. (Institut Teknologi Bandung)
14. Hanson Endra K., ST, M.Eng., Dr.Eng (Institut Teknologi Bandung)
15. Indra Budiman Syamwil, Ph.D (Institut Teknologi Bandung)



16. Dr. Indah Widiastuti, S.T., M.T. (Institut Teknologi Bandung)
17. Iwan Sudrajat, Ir., MSA, Ph.D. (Institut Teknologi Bandung)
18. Dr. Ir. Heru Purboyo, DEA (Institut Teknologi Bandung)
19. Dr. Ing., Ir. Heru W. Purbo, MURP (Institut Teknologi Bandung)
20. Ir. Nurlisa Ginting, M.Sc., Ph.D., IPM (Universitas Sumatera Utara)
21. Ir. Dwira N. Aulia, M.Sc., Ph.D., IPM (Universitas Sumatera Utara)
22. Beny O. Y. Marpaung, S.T., M.T., Ph.D., IPM (Universitas Sumatera Utara)
23. Achmad Delianur Nasution, ST., MT., Ph.D. (Universitas Sumatera Utara)
24. Hilma Tamiami Fachrudin, S.T., M.Sc., Ph.D (Universitas Sumatera Utara)
25. Dr. Eng. Himsar Ambarita (Universitas Sumatera Utara)
26. Prof. Subhilhar, Ph.D. (Universitas Sumatera Utara)
27. Dr. Imam Faisal Pane, ST, MT. (Universitas Sumatera Utara)
28. Amy Marisa Lubis, S.T, M.Sc., Ph.D (Universitas Sumatera Utara)
29. Wahyuni Zahrah, S.T., M.S (Universitas Sumatera Utara)
30. Ir. Indra Surya, M.Sc., Ph.D (Universitas Sumatera Utara)
31. Prof. Dr. Eng. Ir. Irvan (Universitas Sumatera Utara)
32. Dr. Khaira Amalia Fachrudin, S.E., MBA (Universitas Sumatera Utara)
33. Prof. Dr. Ningrum Natasya Sirait, SH, MLI (Universitas Sumatera Utara)

This site uses cookies. By continuing to use this site you agree to our use of cookies. To find out more, see our Privacy and Cookies policy.



☐ NOTICE: Ensuring subscriber access to content on IOPscience throughout the coronavirus outbreak - see our remote access guidelines.

Table of contents

Volume 452

2020

[* Previous issue](#) [Next issue *](#)

The 5th Friendly City International Conference: "Enhancing Culture, Community and Environment" 12 September 2019, Samarinda Utara, Indonesia

Accepted papers received: 05 February 2020

Published online: 13 May 2020

[Open all abstracts](#)

Preface

OPEN ACCESS	011001
Preface	
+ Open abstract View article PDF	
OPEN ACCESS	011002
Committee	
+ Open abstract View article PDF	
OPEN ACCESS	011003
Conference Logo	
+ Open abstract View article PDF	
OPEN ACCESS	011004
Poor review statement	
+ Open abstract View article PDF	

Architecture Theory and Critic

OPEN ACCESS	012001
The influence of archese traditional architecture on government building (Case study: mayor office architecture, Lhokseumawe)	
Nurkasmaya, N M Salsan and P Eddy	
+ Open abstract View article PDF	
OPEN ACCESS	012002
Space in Bulak Karo House: a Phenomenology Architecture Study	
J T A Saugih, M N Loeis and D Lindero	
+ Open abstract View article PDF	
OPEN ACCESS	012003
Unity in diversity: a comparative study of new mosques in Ajman, United Arab Emirates (UAE)	
Jihad Awad and Jalalhi Wahid	
+ Open abstract View article PDF	
OPEN ACCESS	012004
The typology of settlement in the Deli River side Medan Labuhan Subdistrict	
B O Y Marpaung and Hedy P H Sembiring	
+ Open abstract View article PDF	
OPEN ACCESS	012005
Food Production and Distribution from Home Industry in Kampung Kota Jakarta: an Exploration of Urban Spatial Trajectory	
N S Sanosir, Herlily and K R Karniawan	
+ Open abstract View article PDF	
OPEN ACCESS	012006
Eclecticism on the masjid building (case study: Baiurrahman Great Masjid, Banda Aceh City)	
R Maulida, N M Salsan and I P Puteh	
+ Open abstract View article PDF	
OPEN ACCESS	012007
Investigation "Tiny House" in urban kampung: sustainable living or responding to scarcity?	
Inka Anggrani and Herlily	
+ Open abstract View article PDF	
OPEN ACCESS	012008
Revisiting the traditional house in the central area of Sumatra: the case of Dharmasraya in West Sumatra and Batang Kuantan in Riau	
M Khandevi	
+ Open abstract View article PDF	

OPEN ACCESS	012009
Concrete: Politics in the Development of Modern Architecture in Indonesia	
N N Hasan, Y N Lukito and K R Kamirawan	
+ Open abstract View article PDF	
OPEN ACCESS	012010
Meaning of ornament in architecture (Case study: Contemporary Architecture Batak Toba)	
Haryanto Simanjuntak, M Nawarwy Loebis and Dwi Lindarto	
+ Open abstract View article PDF	
OPEN ACCESS	012011
Education aspect of the community participation on developing geotourism Bakau Village	
Fitri A Sinaga, Nurliana Ginting and B O Y Marpaung	
+ Open abstract View article PDF	
OPEN ACCESS	012012
The meaning of spaces in the development of Karo Architecture (case study: shop houses)	
Mohammad Nawarwy Loebis, I F Pane, W Abdillah and S I Aurora	
+ Open abstract View article PDF	
OPEN ACCESS	012013
Architecture as Communication System with Semiotic Theory (Case Study: Tjong A Fie's House)	
I F Pane, H T Fachrudin, H Fibrasari and A S Lubis	
+ Open abstract View article PDF	
OPEN ACCESS	012014
The application of architecture in the tradition of building house based on The Tajul Muluk text	
Harifuzil Azha Lubis, Martalia Mawar Kembaren and Farida Replita Waty Kembaren	
+ Open abstract View article PDF	
OPEN ACCESS	012015
Genius loci in Aceh Utara contemporary architecture	
Ardiana, M N Loebis and H T Fachrudin	
+ Open abstract View article PDF	
OPEN ACCESS	012016
Identification of Application of Biological Architecture in the North Nias's Traditional House "Omo Hada" in Indonesia	
Fanny Siahaan	
+ Open abstract View article PDF	
OPEN ACCESS	012017
The Image of Chinatown on Semarang Street, Medan	
B O Y Marpaung and G A Tarigan	
+ Open abstract View article PDF	
OPEN ACCESS	012018
The influence of historic buildings existence on economic development and regional arrangement: a case study of Menara Kudus area, Indonesia	
A Aslisa and F Linaimia	
+ Open abstract View article PDF	
OPEN ACCESS	012019
Genius loci of shop houses in urban area: A case study in urban secondary cities in Sumatera Utara	
J T Aditya, M N Loebis, B O Y Marpaung, D Lindarto and W Abdillah	
+ Open abstract View article PDF	
OPEN ACCESS	012020
Community perception and adaptation about living in shop house in Medan, Indonesia	
W Zahrah, M N Loebis, Nurliana Ginting and D N Aslia	
+ Open abstract View article PDF	
OPEN ACCESS	012021
Ethnic tourism and sustainable of vernacular settlement in Cibeo Village, Baduy Dalam	
N Solikhah	
+ Open abstract View article PDF	
OPEN ACCESS	012022
User's Behavior Setting of Blok M MRT Station, Jakarta	
N O A Stanggung, A Sihombing, R T Gabe and S C Salubilah	
+ Open abstract View article PDF	
OPEN ACCESS	012023
Urban Form Changes and Post MRT Operation Pedestrian Use Case Study: Bundaran HI MRT Station	
Ismail Adji Pangestu, Antony Sihombing and Nevine Rafa Kusuma	
+ Open abstract View article PDF	
OPEN ACCESS	012024
Impact of Temporary Activity in Pedestrian Circulation Patterns	

A. Muziana, A. Sihombing, R. T. Gabe and A. A. Rahardja

[+ Open abstract](#)
[View article](#)
[PDF](#)

Building Technology

OPEN ACCESS 012025

Mechanical Performance of Reused Plastic Bottle as Structural Floor Panel

MHV Dewi, D Susanto and OC Dewi

[+ Open abstract](#)
[View article](#)
[PDF](#)

OPEN ACCESS 012026

The Utilizations of Plastic Bottle Waste (PET) in Architecture

S. R. Andriani, H. Inaami, N. R. Kusuma and E. Avandra

[+ Open abstract](#)
[View article](#)
[PDF](#)

OPEN ACCESS 012027

Acehnese Vernacular House: The Study of Constructions and Materials Resilience

C. S. Saktia, D. Susanto and E. Suganda

[+ Open abstract](#)
[View article](#)
[PDF](#)

OPEN ACCESS 012028

The performance of the building envelope in high-rise residential related to occupant's comfort

D. S. Octaviani, D. Susanto and E. Suganda

[+ Open abstract](#)
[View article](#)
[PDF](#)

OPEN ACCESS 012029

An Analysis of Architectural Approach Towards the Efficiency of RISHA as Post-Disaster Housing Response in Indonesia

G. T. Gusarto, N. R. Kusuma, E. Arwanda and H. Inaami

[+ Open abstract](#)
[View article](#)
[PDF](#)

Development Studies

OPEN ACCESS 012030

The Study of Regulation on Settlement Development in Medan Belawan District

B. O. Y. Marpaung and Franky

[+ Open abstract](#)
[View article](#)
[PDF](#)

OPEN ACCESS 012031

The Modelling of Commercial Zone Management on The Strip Development in Medan

D. Lindarto, D. D. Harisani and S. O. Sembiring

[+ Open abstract](#)
[View article](#)
[PDF](#)

OPEN ACCESS 012032

The Renewal Model of Medan City Gate Area in Supporting the Mebidangro Metropolitan Concept

D. D. Harisani, H. Suwastoro, D. Lindarto and W. Abdillah

[+ Open abstract](#)
[View article](#)
[PDF](#)

OPEN ACCESS 012033

Developing Tourism Attractions Based on Ecotourism in Aek Nauli Indonesia

N. Ginting and E. Triksa

[+ Open abstract](#)
[View article](#)
[PDF](#)

Economic Growth and Development

OPEN ACCESS 012034

Analysis of the improvements in the land value zone and revenue from rural and urban property taxes in North Sumatera and Aceh Provinces, Indonesia

K. A. Fachrudin

[+ Open abstract](#)
[View article](#)
[PDF](#)

OPEN ACCESS 012035

Model Arrangement of The Meat Village as an Alternative Tourism Destination of Toba Lake

I. Iral, N. M. Sihuan, D. Lindarto and D. D. Harisani

[+ Open abstract](#)
[View article](#)
[PDF](#)

OPEN ACCESS 012036

State-Owned Enterprise Financial Governance: Dilemma of State Wealth Separation

M. I. Amawi, B. N. Nantion, N. Simit and Sunarni

[+ Open abstract](#)
[View article](#)
[PDF](#)

OPEN ACCESS 012037

Consumer protection in digital transactions in Medan

H. Panjaitan, M. L. Panggabean and B. Nainggolan

[+ Open abstract](#)
[View article](#)
[PDF](#)

OPEN ACCESS 012038

The role of notaries in the economic growth of Medan city

O. B. Gultom, B. Ginting, M. Y. Labis and T. K. D. Azwar

[+ Open abstract](#) [View article](#) [PDF](#)

OPEN ACCESS 012039

Optimizing audit of plantation state-owned enterprises in Medan to minimize the risk of losses due to fraud

A Siringo-Ringo, B Nantion, N N Sirait and M Sirigar

[+ Open abstract](#) [View article](#) [PDF](#)

OPEN ACCESS 012040

Transparency standards and information disclosure of bank business activities

A H Nantion, B Nantion, O K Saidin and Sunarmi

[+ Open abstract](#) [View article](#) [PDF](#)

Heritage and Built Environment

OPEN ACCESS 012041

Old shophouses facade of the waterfront city

P Aldy

[+ Open abstract](#) [View article](#) [PDF](#)

OPEN ACCESS 012042

Railway Station as an Element of the Colonial City of Industry: Case Study Cianjur Railway Station

K Mahmalinash, Y N Lukito and K R Kariawan

[+ Open abstract](#) [View article](#) [PDF](#)

OPEN ACCESS 012043

The shophouse facade as a former of Medan City character identity

F Eddy, D Lindarto, D D Haridani and W Abdillah

[+ Open abstract](#) [View article](#) [PDF](#)

OPEN ACCESS 012044

Significance Assessment of the Historic Maimon Palace Area

R Sitona and I Fitri

[+ Open abstract](#) [View article](#) [PDF](#)

OPEN ACCESS 012045

Adaptive Reuse of Colomadu Sugar Factory: Between Preserving Heritage and Social Media Setting

A A S Fajerswati and A A A Wulandari

[+ Open abstract](#) [View article](#) [PDF](#)

OPEN ACCESS 012046

Design of Tourism Development in Cultural Corridors and Public Spaces in Ksion Yogyakarta Area

Mahamad and W S Iri

[+ Open abstract](#) [View article](#) [PDF](#)

OPEN ACCESS 012047

Challenges for Heritage Conservation and Management in Medan, North Sumatra, Indonesia

I Fitri, Ratna, A Maria and R Sitona

[+ Open abstract](#) [View article](#) [PDF](#)

OPEN ACCESS 012048

Understanding the Historic Centre of Merdeka-Kesawan: Heritage Significance Assessment in Planning and Development Context

Iman Fitri, Ratna, Amy Maria and Radolf Sitona

[+ Open abstract](#) [View article](#) [PDF](#)

OPEN ACCESS 012049

Lighting Design for Artifacts Preservation Purposes and Visual Comfort in Museums

L Yohardi, O C Dewi, J Sandrauri and M N Widyarta

[+ Open abstract](#) [View article](#) [PDF](#)

OPEN ACCESS 012050

The Role of Artificial Lighting in the Commercial Heritage Buildings: Restaurant

D D Puspita, O C Dewi, J Sandrauri and M N Widyarta

[+ Open abstract](#) [View article](#) [PDF](#)

OPEN ACCESS 012051

Tracing the Chinese Settlement in Pekalongan: Reading Changes in the Past for Concepting Future Development

TSR Nantion and W Setyawan

[+ Open abstract](#) [View article](#) [PDF](#)

OPEN ACCESS 012052

The Study About The Comparison Between Batak Toba Traditional House in Huta Raja Samosir and Lumban Binanga Toba Samosir

N Napitupulu, E Arionang and S Sihonga

[+ Open abstract](#) [View article](#) [PDF](#)

OPEN ACCESS 012053

Customer-based brand equity for a tourist destination (A study on Nusantara tourists at Maimon Palace, Medan City)

O M Sirigar, N Marpaung and M B Abdillah

[+ Open abstract](#) [View article](#) [PDF](#)

OPEN ACCESS 012054

The Study About The Relationship of 'Daliha Na Tohi' With Batak Traditional Architecture; Case Study Huta Raja Village Samosir

BE Hutagaol, N Simanungkal and S Silironga

[+ Open abstract](#) [View article](#) [PDF](#)

OPEN ACCESS 012055

The Landmark Aspect of Distinctiveness Toward The Religious Tourism In Langkat District

N Ginting, N V Rahman and N Huma

[+ Open abstract](#) [View article](#) [PDF](#)

OPEN ACCESS 012056

Art and design exhibition contribution in preserving local cultural heritage for tourism development

T Endahyuni

[+ Open abstract](#) [View article](#) [PDF](#)

OPEN ACCESS 012057

Physical Quality of Creative Economic Space on Cultural Tourism Areas in Java Island

N Nardiani, R Handarti and M Tadjia

[+ Open abstract](#) [View article](#) [PDF](#)

OPEN ACCESS 012058

Smart Heritage: Media for Realizing Cultural Heritage Conservation in The Smart City Era

S M Adrian and K R Kamiliawan

[+ Open abstract](#) [View article](#) [PDF](#)

OPEN ACCESS 012059

Chinese-Malay wood carving: the Kapitan house at Bagansiapiapi

G Faizal and Y Firdzal

[+ Open abstract](#) [View article](#) [PDF](#)

OPEN ACCESS 012060

The Review of *Sas*'s Construction Material Based on the Principles of Sustainability

K Lahji, A R Laksono, P Pujiastuti and R Wicakretina

[+ Open abstract](#) [View article](#) [PDF](#)

Human and Society

OPEN ACCESS 012061

The Influence of Social Media on Use in Public Space (Case Study of Lapangan Merdeka Medan)

D Fardhina, M N Loeblein and W Zahrah

[+ Open abstract](#) [View article](#) [PDF](#)

OPEN ACCESS 012062

Developing friendly city and friendly village based on local culture: An Anthropological Study

Robert Sibarani

[+ Open abstract](#) [View article](#) [PDF](#)

OPEN ACCESS 012063

Designing furniture as learning facilities for early young child education in Desa Gunung Sari, Tangerang

S Sa Devanthy Ganesha and S Sa Ryan Adiputra

[+ Open abstract](#) [View article](#) [PDF](#)

OPEN ACCESS 012064

Preserving village culture, identity, and sense of belonging through visual identity design for public children playground (case study: Mekar Bakti village, Panongan regency, Tangerang)

A Zulkarnain, H Soemarto, P JO Sugandi and F Fergiani

[+ Open abstract](#) [View article](#) [PDF](#)

OPEN ACCESS 012065

Protection of public interests in the administration of legal metrology in Medan

M P J Pasaribu, NN Sinit and M Singar

[+ Open abstract](#) [View article](#) [PDF](#)

OPEN ACCESS 012066

Preserving local wisdom on water conservation through video documentary (case studies: Mekar Bakti Village, Panongan Regency, Tangerang)

M L Katoppo, L P Santyaputri, I Syarifina and J Winarna

[+ Open abstract](#) [View article](#) [PDF](#)

OPEN ACCESS 012067

Building environmental awareness for future generation through educational comic: the story of 4th-grade students Darussalam elementary school, Panongan, Tangerang

M L Katoppo, E Irawandi, A H Ng and S Lie

[+ Open abstract](#) [View article](#) [PDF](#)

OPEN ACCESS 012068

Development of Japanese Community in Blok M area seen from aspect of business and industry

C Jonathan, E C Marion and P A Dewi

[+ Open abstract](#) [View article](#) [PDF](#)

OPEN ACCESS

012069

Sampun Kajang: the orang laut's maritime cultural heritage in the East Coast of Sumatra

Ichwan Azhari, Ida Liana Tanjung and Onggal Sihite

[+ Open abstract](#) [View article](#) [PDF](#)

OPEN ACCESS

012070

Professional and moral responsibilities of notaries in supporting development in Medan City

E Natsari, B Ginting, R Sitompul and S Kalo

[+ Open abstract](#) [View article](#) [PDF](#)

OPEN ACCESS

012071

The impact of globalization on corporations conducting illegal fishing in North Sumatera

T Sitkha, A Syahrin, Salsidi and M Ekaputra

[+ Open abstract](#) [View article](#) [PDF](#)

OPEN ACCESS

012072

Applying e-commerce marketing for global economic development in Medan

Stella, B Ginting, O K Saidin and T K D Arwan

[+ Open abstract](#) [View article](#) [PDF](#)

OPEN ACCESS

012073

Law enforcement on the issuance of construction permits violating spatial planning in Medan City

Anton, Edwarman, Madiana and M Hamdan

[+ Open abstract](#) [View article](#) [PDF](#)

OPEN ACCESS

012074

Alternative dispute resolution in traffic accidents in North Sumatera highway

Serim Piasen, Ranting, S H M Ham, Syahudin Kalo, S H M Ham, Budiman Ginting and S H M Ham

[+ Open abstract](#) [View article](#) [PDF](#)

OPEN ACCESS

012075

Housing preference of small scale Gated Community residents in Medan City, Indonesia

Dwira Nirfidi Aulia and Kenny Christen

[+ Open abstract](#) [View article](#) [PDF](#)

OPEN ACCESS

012076

Place attachment of the ecotourism in Sicanang Mangrove

Nurlia Ginting and Christ Rayni Singar

[+ Open abstract](#) [View article](#) [PDF](#)

OPEN ACCESS

012077

Contributing social safety and security for elderly-friendly environment (case study of Briyat Tourism Village, Yogyakarta, Indonesia)

L A Radwanti and V R Vitasarya

[+ Open abstract](#) [View article](#) [PDF](#)**Organization and Management**

OPEN ACCESS

012078

Strategic planning for developing coffee as a tourist attraction in Rural Area (Case study: Campakamulya Village, Bandung, West Java, Indonesia)

D H Syahchari and Y Maulana

[+ Open abstract](#) [View article](#) [PDF](#)

OPEN ACCESS

012079

Analysis of customer satisfaction level factors on service of PDAM Tirtanadi in Padang Bulan branch

M A Ridha, A Marisa and B O Y Marpaung

[+ Open abstract](#) [View article](#) [PDF](#)

OPEN ACCESS

012080

Civil Liability of Construction Service Providers Against Building Failures in the Taxiway Construction Agreement of Kuala Namu International Airport

D Saiful, T Kamello, H Purba and E Ikhsan

[+ Open abstract](#) [View article](#) [PDF](#)

OPEN ACCESS

012081

Evaluation of the delayed fiber optical installation project on pre-sales division at PT XYZ

S Hamali, A G R Nurliska, A M Firdausi and M S Setiawan

[+ Open abstract](#) [View article](#) [PDF](#)

OPEN ACCESS

012082

Production quality control with new seven tools for defect minimization on PT. Dirgantara Indonesia

R Ginting and M O Fatah

[+ Open abstract](#) [View article](#) [PDF](#)

OPEN ACCESS

012083

Analyzing important work motivations for architects in the project delivery process

A. Maria and B. Talamaha

[+ Open abstract](#)
[View article](#)
[PDF](#)

OPEN ACCESS

Identifying attributes for measuring design professionals' work quality in project delivery process

012084

A. Maria and N. A. Yusuf

[+ Open abstract](#)
[View article](#)
[PDF](#)

OPEN ACCESS

Environmental permission and environmental crime in law enforcement concerning living environmental management and protection

012085

D. K. Dewi, A. Syahrin and M. Haryuni

[+ Open abstract](#)
[View article](#)
[PDF](#)

OPEN ACCESS

Harmonizing national interest and local autonomy: Finding an effective institutional arrangement for regional development in Indonesia

012086

Subilihar

[+ Open abstract](#)
[View article](#)
[PDF](#)

OPEN ACCESS

Problems in high rise residential building: From management perspective

012087

F. U. M. Azlan, N. Yusuf and E. M. Kamal

[+ Open abstract](#)
[View article](#)
[PDF](#)

Physical Environment

OPEN ACCESS

The influence of agroindustry on the formation of rural settlements. Case study: Bangun Sari Village, Tanjung Morawa

012088

D. N. Aulia and P. A. N. Handayani

[+ Open abstract](#)
[View article](#)
[PDF](#)

OPEN ACCESS

Effect of varied salt concentration and freshwater adaptation to the growth of *Bruguiera cylindrica* seedlings

012089

M. Haryuni, S. S. Nainggolan and P. A. Z. Harbuan

[+ Open abstract](#)
[View article](#)
[PDF](#)

OPEN ACCESS

Effect of parent shade on the growth and morphological characteristics in six mangrove seedlings

012090

M. Haryuni, T. Miharza, E. K. Siswalingga, E. N. Gulison, Y. Hilmastara and Yusaeli

[+ Open abstract](#)
[View article](#)
[PDF](#)

OPEN ACCESS

Designing a lifting tool work using SNQ and anthropometry

012091

R. Ginting, D. Nurhadi and A. F. Malik

[+ Open abstract](#)
[View article](#)
[PDF](#)

OPEN ACCESS

Spatial Analysis of Critical Land in Sub-Watershed of Lawe Pakan, Mandailing District, Karo Regency, North Sumatra Province

012092

Jeni Riviana, Abdul Rauf and Rahmawaty

[+ Open abstract](#)
[View article](#)
[PDF](#)

OPEN ACCESS

Analysis of the effectiveness of evacuation paths in terms of mall visitors evacuation speed (Case Study: Mall Palladium)

012093

N. V. Rahman and M. H. Nadapdap

[+ Open abstract](#)
[View article](#)
[PDF](#)

OPEN ACCESS

Evaluation of Fire Passive Protection System in Housing (Case Study: Tegai Sari II Mandala, Medan)

012094

N. V. Rahman and A. S. Ginting

[+ Open abstract](#)
[View article](#)
[PDF](#)

Quality Of Life

OPEN ACCESS

Investigating community adaptability and resilience in Urban Kampung, study case: Water and sanitation infrastructure of Kampung Muka, North Jakarta

012095

N. S. Putri and Herlity

[+ Open abstract](#)
[View article](#)
[PDF](#)

OPEN ACCESS

Study of market activities as public spaces on planned settlement (case study: Deli Indah Estate, Medan)

012096

Dwira Nirfalini Aulia and Oki Wibowo Halim

[+ Open abstract](#)
[View article](#)
[PDF](#)































OPEN ACCESS

Study of public space activities in the main corridor of J. City Estate, Medan City, Indonesia

012097

Dwira Nirfalini Aulia and Lidya Nathania Napitupulu

[+ Open abstract](#)
[View article](#)
[PDF](#)

OPEN ACCESS	012098
Designing for behavioral change: Transforming of rural home into tourism facilities	
Y Sofiana	
+ Open abstract  View article  PDF	
OPEN ACCESS	012099
Spatial adaptation strategies of HBE in Kampong Batik Trusmi Cirebon	
Virginia Ramadhani, Coriema Dian Sulistiani and Nevine Rafi Kusuma	
+ Open abstract  View article  PDF	
Sustainable Built Environment	
OPEN ACCESS	012100
Obligations of Indonesian Sustainable Palm Oil (ISPO) certification for oil palm plantation companies in North Sumatra to support sustainable development	
M Firdaus, T Kamello, O K Saldin and Susanti	
+ Open abstract  View article  PDF	
OPEN ACCESS	012101
Mechanism of value capture on gated community housing by developers in Jakarta Metropolitan Area	
E H Clabris and A Gamal	
+ Open abstract  View article  PDF	
OPEN ACCESS	012102
Park use patterns among children- dual roles of neighbourhood parks	
Nor'Alini Yusof, Akmer Abdulrazwad and Samah M. El-Khatib	
+ Open abstract  View article  PDF	
OPEN ACCESS	012103
The carbon footprint of Trisakti University's campus in Jakarta, Indonesia	
J Iskandar, N Rahma, D Romarti and A B Purnomo	
+ Open abstract  View article  PDF	
OPEN ACCESS	012104
Determination of recharge areas to optimize the function of urban protected areas on a small island	
A Achmad, I M Idris, H Zaidi and I Ranti	
+ Open abstract  View article  PDF	
OPEN ACCESS	012105
Aquifer analysis of Durenkayu-Karangaji water source in Pandaan, Pasuruan using 2D resistivity method in identifying pollution of domestic waste	
A S Bahri, P R Arpin, P V Hardiyani, A Hilyah, M S Purwanto, M H M Fajar and Devona	
+ Open abstract  View article  PDF	
OPEN ACCESS	012106
Technoeconomic analysis of a solar rooftop: a case study in Medan city, Indonesia	
W S Nababan, H V Sibombing and H Ambarita	
+ Open abstract  View article  PDF	
OPEN ACCESS	012107
A preliminary test of solar roof top in Medan city of Indonesia	
Hendrik V. Sibombing and Hinar Ambarita	
+ Open abstract  View article  PDF	
OPEN ACCESS	012108
The performance of thermal property in concrete containing waste pet (polyethylene terephthalate) as an alternative sustainable building material	
N P A Halim, N Taib and Z A Aziz	
+ Open abstract  View article  PDF	
OPEN ACCESS	012109
Green Area of Daan Mogot low-cost apartment (<i>Rusunawa</i>) in West Jakarta as one efforts to create sustainable built environment	
Ulinata	
+ Open abstract  View article  PDF	
OPEN ACCESS	012110
The changing effects through biophilic design in increasing elderly memory capacity: Case study: Sasana Trema Werdha Yayasan Karya Bakti Ria Pembangunan, Cibubur	
R Felly and D Susanto	
+ Open abstract  View article  PDF	
OPEN ACCESS	012111
Efficiency on artificial lighting energy: dome, pyramid and flat shaped - ceiling mosque	
Aisyah, TH Pandjaitan, AD Imanyo and OC Dewi	
+ Open abstract  View article  PDF	
OPEN ACCESS	012112
Child-friendly city: a strategy to provide child protection right in Medan	
Rozmalinda, Ningrum Nurayya Sirait and Eddy Ikhsan	
+ Open abstract  View article  PDF	

OPEN ACCESS	012113
Taman Monas Resilience on vegetation due to response to the festival of "Pesta Rakyat"	
D Larandya, O Dewi and M Widyarta	
+ Open abstract View article PDF	
OPEN ACCESS	012114
The influence of biophilic design applications to visitor's duration of stay in café	
N I Silalahi, O C Dewi and M N Widyarta	
+ Open abstract View article PDF	
OPEN ACCESS	012115
Transportation planning on green campus	
Hilma Tamiyati Fachradin	
+ Open abstract View article PDF	
OPEN ACCESS	012116
Plastic material as building façade	
Vinna Oktavia and Nevine Rifa Kusuma	
+ Open abstract View article PDF	
OPEN ACCESS	012117
The effect of morphology of post-tsunami coastal physiography on sustainability system of relocation settlement. Case study: Gampong Sane, Lhoong sub-district, Aceh Besar regency	
W Ellyus, A Fahmi, Z Evalina and A Myna	
+ Open abstract View article PDF	
OPEN ACCESS	012118
The quality of information desired by paratransit users in Medan, Indonesia	
Reynaldo Sibuan, Simon Dertha Tarigan and Jonna Hutauruk	
+ Open abstract View article PDF	
OPEN ACCESS	012119
Capacity building for citizens in creating green and clean villages based on empowerment and social intervention	
Herdia Herdiansyah, Andrian Eka Laciarto, Donna Astaria and Dwini Handayani	
+ Open abstract View article PDF	
OPEN ACCESS	012120
The uniqueness of the environmental aspects of sustainable tourism on Samosir Island	
Nurliana Ginting and Michaela	
+ Open abstract View article PDF	
OPEN ACCESS	012121
Green revitalization of historical settlements for responsible tourism in mediterranean areas: the multiscale approach of VIVIMED project and the experience of Albergo Diffuso	
A Trombadore	
+ Open abstract View article PDF	
OPEN ACCESS	012122
Investigation of Museum Exhibition Display in Terms of Inclusive Information for Blind Visitors.	
S. Pradianti, E. Arwinda, H. Inaeni, E. Nursamy and N.R. Kusuma	
+ Open abstract View article PDF	
OPEN ACCESS	012123
Obstacles as determining factors of independent wheelchair user's spatial experience at public transitional space	
Hediarar Fauzana, Ir. Hendriyasa Inaeni, S.T. Enim Arwinda and S.Ari. Nevine Rifa Kusuma	
+ Open abstract View article PDF	
OPEN ACCESS	012124
Biogas : Alternative energy on supporting environmentally coffee shop in Samosir Island	
Nurainah Ginting, Atifah N Tarigan and Inqilab Akbar Royba	
+ Open abstract View article PDF	
OPEN ACCESS	012125
The potency of implementation resource efficient and cleaner production in a Palm Oil Mill with capacity 30 ton per hour	
Il. Ambarita and N.D.M. Romauli	
+ Open abstract View article PDF	
Town Planning	
OPEN ACCESS	012126
Dark tourism's products development: the cases of Fatahillah Dungeon and Taman Prasasti Museum	
Indra Kumarawartana, Wendy Putama Tarigan, Kasih Cakaputra Komary and Yopy Marlana	
+ Open abstract View article PDF	
OPEN ACCESS	012127
Identifying the effect of tenant mix on rental price	
N Zafira and A Gamal	
+ Open abstract View article PDF	

OPEN ACCESS	012128
The adolescents gathering space at <i>kampung</i> in the Periphery of Tangerang Selatan City	
Fahmi Arifin and Eswani Elina	
+ Open abstract View article PDF	
OPEN ACCESS	012129
How Liveable is living in public housing? a Liveability measurement at low-income apartment of Kompleks Rumah Susun Sombu, Surabaya	
Evelina Vialta and Diaz Rahmawati	
+ Open abstract View article PDF	
OPEN ACCESS	012130
The ecological influences in forming waterfront settlements in Pangururan Sub-district, Samosir Regency.	
B O Y Marpaung and R Senders	
+ Open abstract View article PDF	
OPEN ACCESS	012131
Kampung as a model of transit-oriented development: a case study of Kampung Muka, North Jakarta	
Fachrian Nabil Fauzi and Herlily	
+ Open abstract View article PDF	
OPEN ACCESS	012132
Morphological study of Kabanjahe Subdistrict assessed from physical aspects of ecology (2010-2019)	
R R Bimbun, B O Y Marpaung and W Utami	
+ Open abstract View article PDF	
OPEN ACCESS	012133
Study of regulation development of settlements in the edge of water in Pangururan Samosir District	
B O Y Marpaung and D Triksa	
+ Open abstract View article PDF	
OPEN ACCESS	012134
Assessment of accessibility of recreational facilities through identification and mapping focus on Greater Jos, Plateau State Nigeria	
Peter Musa Wab, Mohamed Badaruddin and Ismail Mohd	
+ Open abstract View article PDF	
OPEN ACCESS	012135
Land-use Planning for Geotourism Development in Bakau Caldera Toba, Indonesia	
Nurlina Ginting, N Vicky Rahman, Achmad D Nasution and A Nirwa Dewi	
+ Open abstract View article PDF	
OPEN ACCESS	012136
The effect of road expansion on the use of space(case study: Simpang Ujung Aji Road section - the boundary of Kabanjahe City, North Sumatra)	
SNIH Harshap, A Marisa and AD Nasution	
+ Open abstract View article PDF	
OPEN ACCESS	012137
The Distribution Pattern Analysis of Housing in Medan Using The Nearest Neighbor Analysis Approach	
Faziz Hamzah, DwinaNiridini Aulia and Amy Marisa	
+ Open abstract View article PDF	
Urban Design	
OPEN ACCESS	012138
Urban analysis: reading the elements and layers of Asian cities, a case study of Banda Aceh-Indonesia	
Y Rahmayati	
+ Open abstract View article PDF	
OPEN ACCESS	012139
Urban quality measurement and it's influence to sense of place	
Hilma Tamiami Fachrudin	
+ Open abstract View article PDF	
OPEN ACCESS	012140
Studying walkability preferences using urban design qualities: A Case of Riyadh, Saudi Arabia	
A Panuhar and H Haryan	
+ Open abstract View article PDF	
OPEN ACCESS	012141
Evaluation of oceanfront settlement areas, case study of Jalan Kelapa, Ilir Village, Gunungsitoli City	
Abdial Sozaro Zandrato, Nelson M Sibuan and Dwina N Aulia	
+ Open abstract View article PDF	
OPEN ACCESS	012142
The Implementation of Feng Shui in The Chinatown District of Asia Mega Mas Medan	
B O Y Marpaung and Jenny	
+ Open abstract View article PDF	

OPEN ACCESS	012143
The study of public perceptions on the quality service of Trans Mebidang Bus	
Yusuf Aulia Lubis, Ahmad D Nuzriati and Amy Marisa	
+ Open abstract View article PDF	
OPEN ACCESS	012144
Study of building arrangements in the old city corridor of Tanjung Pura	
Nurhan Ginting, B O Y Marpaung and Indriana Sri Marperi	
+ Open abstract View article PDF	
OPEN ACCESS	012145
Visitor perceptions related to the comfort aspects of Jassam I/BB park	
Tanjung Fahri Raza, B O Y Marpaung and Amy Marisa	
+ Open abstract View article PDF	
OPEN ACCESS	012146
The Islamic public space concept in the Southeast Asia region as a friendly urban design and planning enlightening	
E Zuraidi, I Caisaria and Z. Puady	
+ Open abstract View article PDF	
OPEN ACCESS	012147
Study of Cemas Traditional Market development in Medan Timur District	
Mario Hasian Sitohang, B.O.Y Marpaung and Amy Marisa Lubis	
+ Open abstract View article PDF	
OPEN ACCESS	012148
Walkability in Banda Aceh: An approach in urban mobility development	
Muhammad Ali Nuzriati	
+ Open abstract View article PDF	
OPEN ACCESS	012149
Reading the potential of urban pocket through narrative approach	
A Wibisono, J Dewi and R Partan	
+ Open abstract View article PDF	
OPEN ACCESS	012150
Value of the street: an inquiry of children placemaking in Waskas, North Jakarta	
Azzura Chandra Muzarob and Herlity	
+ Open abstract View article PDF	
OPEN ACCESS	012151
Domination in the communal space	
M Siagian, R Sitona and F Eddy	
+ Open abstract View article PDF	
OPEN ACCESS	012152
The production of the new space as the solution of outdoor space planning problem	
M Siagian, R Sitona and F Eddy	
+ Open abstract View article PDF	
OPEN ACCESS	012153
The implementation of the Crime Prevention Through Environmental Design (CPTED) concept on Taman Seriahadi Indah 1 Estate, Medan City, Indonesia	
Dwira Nirfalini Aulia and Yulinda Eka Mahwani	
+ Open abstract View article PDF	
OPEN ACCESS	012154
Gated community typology based on growth and development in Medan City, Indonesia	
Dwira Nirfalini Aulia and Lia Suryani	
+ Open abstract View article PDF	
OPEN ACCESS	012155
Study on semiotics in urban vernacular: A case study of shop houses	
D Fardiana, M N Loshia, B O Y Marpaung, D Lindarto and W Abdilah	
+ Open abstract View article PDF	
OPEN ACCESS	012156
Gentourism and stakeholders: An approach to enhance geoconservation	
N Ginting, B O Y Marpaung, F A Sinaga, N Naria and N Singar	
+ Open abstract View article PDF	
OPEN ACCESS	012157
"Aur Market Place" - Activator and Interaction Space to Support and Living Up Tourism of Kelurahan Aur	
A Mahanani and P Kurnajaya	
+ Open abstract View article PDF	
OPEN ACCESS	012158
Legibility of Building Facades and Imagesability of Historical City Center, Case Study: Bukittinggi City Center	

D Nurgandarm and C P Anjani

[+ Open abstract](#)
[View article](#)
[PDF](#)

OPEN ACCESS

Affordance of sitting place in parks as a support for passive and active recreation

012159

TR Petrisanti, A Sihombing, T Rachmawati and NR Kusuma

[+ Open abstract](#)
[View article](#)
[PDF](#)

OPEN ACCESS

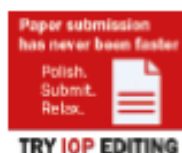
Analyze of physical land use changes : Case study: Gagak Hitam Street, Medan

012160

F Novitasari, Dwira Nirlalini Aulia and H T Fachrudin

[+ Open abstract](#)
[View article](#)
[PDF](#)

JOURNAL LINKS

[Journal home](#)
[Information for organizers](#)
[Information for authors](#)
[Search for published proceedings](#)
[Contact us](#)
[Reprint services from Curran Associates](#)


PAPER • OPEN ACCESS

Ethnic tourism and sustainable of vernacular settlement in Cibeo Village, Baduy Dalam

To cite this article: N Solikhah 2020 *IOP Conf. Ser.: Earth Environ. Sci.* **452** 012021

View the [article online](#) for updates and enhancements.

Ethnic tourism and sustainable of vernacular settlement in Cibeo Village, Baduy Dalam

N Solikhah^{1*}

¹ Department of Architecture and Planning, Faculty of Engineering, Tarumanagara University Campus 1, L Building, 7th Floor, Jl. Let Jen. S. Parman Number 1, West Jakarta 11440, Indonesia

*Email: nafiahs@ft.untar.ac.id

Abstract. Ethnic identities in developing countries become a focus of recent research one is related to ethnic tourism. One of ethnic tourism based on Vernacular Settlement is in Cibeo Village, Baduy Dalam, Banten Province. The opening of access in Ciboleger in the 1970s opened the opportunity of ethnic tourism. This study aims to review the phenomenon of Ethnic Tourism and Sustainable of Vernacular Settlement in Cibeo Village. The research paradigm used is naturalistic with a qualitative research strategy in the form of the Ethnography Approach. The method of data collection is through residencies in Cibeo Village to capture phenomena on the vernacular settlement as a natural setting and ethnic tourism. The results show that tourism plays an important role which is not always a negative impact on vernacular settlements. Ethnic tourism becomes one of an factor in the ongoing construction of place identity and senses of a place of vernacular settlement in Cibeo Village. This study provides implication: *First*, that cultural system carried out by vernacular society determine sustainable of vernacular settlement. *Second*, that the key of successful Sustainable Vernacular Settlement is the growth and development of its local wisdom.

1. Introduction

Ethnic tourism is as a part of cultural tourism and be an important part of the global tourism industry [1]. According to Li [2], the term *ethnic tourism* is defined as *tourism marketed to the public in terms of the 'quaint' customs of indigenous and often exotic peoples*. Since then, the concept and its consequences have been discussed extensively, particularly about links between tourism and ethnicity, and the impacts of tourism on ethnic minorities [2]. According to Li [3], Ethnic tourism is motivated by tourist's search for exotic cultural experiences through interaction with distinctive minority groups. Activities typically include visiting ethnic villages, native homes, and ethnic themeparks and involvement in ethnic events and festivals, eating local foods, watching traditional dances and ceremonies, and shopping for handicrafts and other souvenirs.

Architectural elements seem to be capable of making a contribution to ethnic tourism along with the social life of the community manifested in the vernacular settlement. Vernacular architecture tends to evolve to reflect the environmental, cultural, and historical context in which it exists. Each community have local knowledge in addressing the environment, and it has become part of their way of life. Therefore, the local wisdom of vernacular community is the basis for the concept of sustainable of the built environment also plays an important role in forming a regional spatial structure. Spatial and physical forms of traditional architecture refer to the non-physical aspect such as customs, beliefs,



and harmonize with the built environment. According to Amos [4], the relationship between humans and their environment is full of meaning, symbols, and norms. Meaning of the built environment that reflects the values chosen, defined and owned by the community, but natural environmental factors can not be separated because they are interrelated.

Lindsay A and Marcel V [7] notes that studying and analysing the dynamics, change, success and failure of these vernacular responses will enable the identification of general principles and mechanisms that may lead to insights into the nature of design and, as such, may provide the lessons of use to those involved in the development of more sustainable future environments. Vernacular architecture should be explicitly treated as a cultural process rather than as merely a material product. The issues surrounding the potential, function, and meaning of vernacular architecture in the twenty-first century are complex and extensive. The support that opinions, Martinus [5] argued that the critical issue of vernacular architecture is related to sustainable development and the continuation of cultural life in harmony with nature. Excerpted from Octavianus [6], Paul Oliver in his book *Encyclopedia of the Vernacular Architecture of the World*, argues about the context of the environment and resource limitations, the owner of vernacular buildings are usually built their building themselves or with the cooperation of local community by utilizing traditional technologies. Entire formation of vernacular architecture is to meet a specific need and strive to accommodate the system of values, economic conditions, and the way of life of the community institutions that bring it culturally.

Among the new environmental ethics of the twenty-first century, sustainability has emerged as one of the most important and internationally endorsed principles, especially in the world of architecture as cyclical period of sustention. Sustainability applies to dwellings as well as to religious or communal monuments. Tradition ceases to be active when outside forces break these cycles of transmission of information or technology. Changes that ignore the complex nature of social and environmental yield inappropriate architecture [7].

According to Muhammad [8], local wisdom leads human behavior in life in ecological communities, such as knowledge, belief, understanding, or insight as well as custom or ethic. In ethnic tourism, making a better tourism program is a must to save vernacular settlement. One of the tourism program is sustainable tourism that provide an interactive experiences for tourists. Tourists involve in any recreational activities, educational activities, culturally, and ecologically, as well as helping the local economy and promoting the development of Village Tourism.

The concepts of sustainable tourism and experiencing other cultures have been favorite in tourism in recent years. Several people, within the scope of rural tourism, prefer to be together with people in their cultural landscape and try to live contenting themselves with what nature has given. The visitors use the vernacular house to experience that culture. When the vernacular architectural are evaluated in terms of their contribution to rural tourism, these vernacular architectural elements seem to be capable of making an important contribution to rural tourism [9].

One of ethnic tourism based on Vernacular Settlement is in Cibeo Village, Baduy Dalam, Banten Province. There are an "inner" and an "outer" Baduy territory as one of an elaborate interweaving of settlement, geography, and cosmology. Within the inner territory, all taboos must be strictly followed, and transgressions can be punished by exile to the outer villages. The existence of the Baduy territory serves to maintain cosmic harmony and its people as the guide to adat customs [10].

Baduy is also known as Kanekes. Inner Baduy (Tangtu/ Baduy Dalam) consists of 3 Villages, namely: Cibeo, Cikartawana, Cikeusik. While the Outer Baduy (Panamping/ Baduy Luar) currently consists of 65 villages scattered in the Kanekes region. The Baduy Indigenous People's Settlement Area in RTRW Banten Province Year 2010-2030 is one of the Provincial Strategic Areas for the benefit of social culture.

Several European researchers has been know Baduy since the beginning of the 19th century, one of them from publication Spanoghe, "De Heidenen of Badoewienen van Bantam" in *Tijdschrift Voer Nederlandsch Indi (TNI)* I, No.11, 1838, 295-305 [11]. The opening of access in Ciboleger in the 1970s opened the opportunity of ethnic tourism. Eventhough tourism introduces processes that

increasingly link villagers with the outside, it simultaneously allows them to continue their ongoing life [11].

According to Jingjing [12], it is not uncommon that traditional ethnic culture is used and marketed by governments and the tourism industry as a resource for attracting tourists and investments. The nature of ethnicity in these societies poses interesting and instructive questions about the intersection of the tourism industry, state policies, and ethnic identities. Whereas Timothy [13] argues that the process of commercialism and cultural integration associated with tourism becomes a factor in the ongoing construction of place identity and does not break down a place-based sense of identity or render it inauthentic. A broader set of political, economic, and cultural processes built place-based identity. In many places in Asia, tourism has become an example of these processes. They injecting a new set of conditions into local expressions of identity and sense of place. Locals have quickly learned to appropriate the tourist experience in their claims of place identity. Tourism is a powerful social and cultural force. Broader historical processes, such as: commercial trade, military campaigns, state revenue collection or political campaigns, and foreign missionaries have conditioned local actors in constructing their senses of place.

This study aims to review the phenomenon of Ethnic Tourism and Sustainable of Vernacular Settlement in Cibeo Village. Figure 1 shows A conceptual framework is developed and employed to explore the relationship between ethnic tourism and sustainable of vernacular settlement in Cibeo Village, Baduy Dalam.

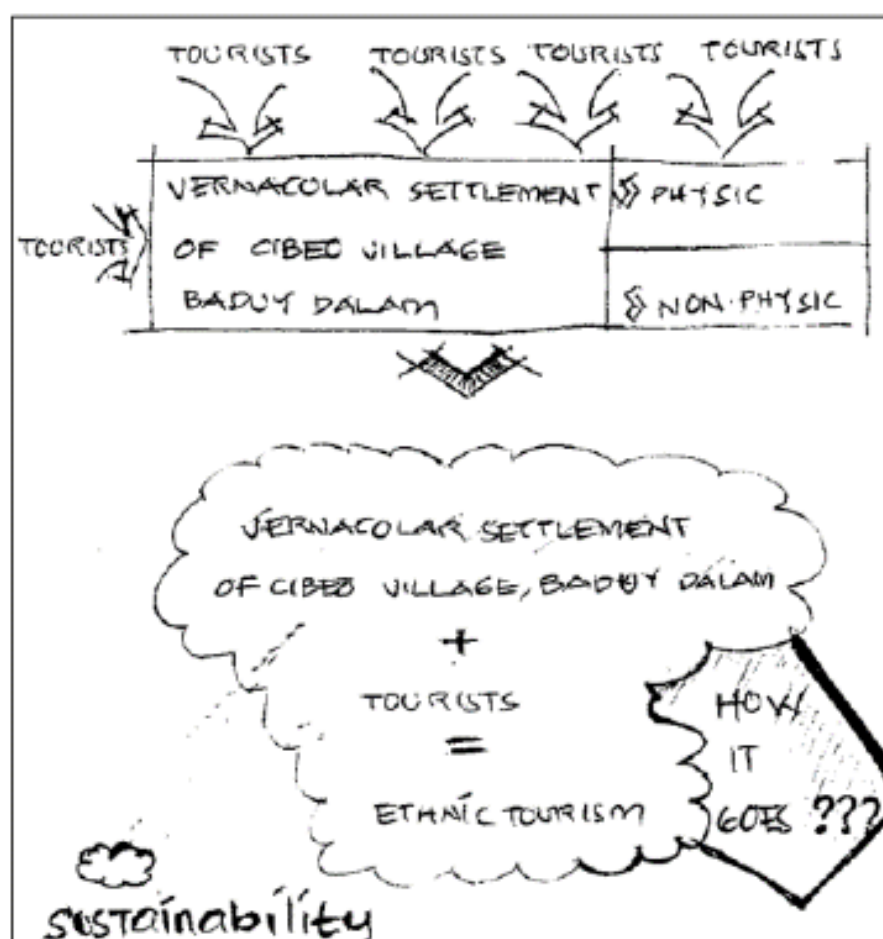


Figure 1. Conceptual framework.

Source: Author, 2019

2. Method

The research paradigm used is naturalistic with a qualitative research strategy in the form of the Ethnography Approach. According to Linda and Groat [14], the overall characteristics of ethnographic work are the holistic exploration of a data set using context-rich detail; a reliance on unstructured data; a focus on a single or a small number of the case; and data analysis that emphasizes the meanings and functions of human action. Ethnography lays particular emphasis on the immersion of the researcher in a cultural context and the attempt to ascertain how those living in that context interpret their situation.

The method of data collection was carried out through a field survey, where researchers conducted a residency/ live in at Cibeo Village and stayed in the residents' house to identify and capture the phenomenon. Residency/ live in 3 times:

- Saturday-Sunday (September 22-23, 2018)
- Saturday-Sunday (January 19-20, 2019)
- Saturday-Sunday (June 22-23, 2019)

Author concerned with the qualities of the physical environment and the way people living there experienced in than with the other anthropological issues. The author wrote field notes, did some sketches as primary sources because no photograph in Baduy Dalam, took a photographs to the outer limits of Baduy Luar, talked to the people in Baduy Dalam (villagers, customary stakeholders, and visitors) using unstructured interviews.

The analysis is carried out exploratively in the following stages:

- Exploration Vernacular Settlement of Cibeo Village, Baduy Dalam
- Exploration Social System of Cibeo Village, Baduy Dalam
- Exploration Ethnic tourism and sustainable of vernacular settlement in Cibeo Village, Baduy Dalam elaborated with several theories.

The boundaries of the study area are Cibeo Villages, Baduy Dalam, Kecamatan Leuwidamar, Kabupaten Lebak, Provinsi Banten, Indonesia (Figure 2).



Figure 2. Location of Cibeo Villages, Baduy Dalam, Kecamatan Leuwidamar, Kabupaten Lebak, Provinsi Banten, Indonesia.

Source: Author, 2019

3. Results and Discussions

3.1. Vernacular Settlement in Cibeo Village Baduy Dalam

The local community in Cibeo Village, Baduy Dalam has the local knowledge to build their settlement. They are usually built their vernacular settlement with the cooperation of local community by utilizing traditional technologies. Vernacular settlement in Cibeo village, Baduy Dalam is comprising the dwellings and supporting buildings for the people.

Baduy community is obedient in maintaining and carrying out the inheritance of ancestral rules (*pikukuh*) in daily life [15]. The field observation by Author reinforce this statement. Local wisdom unconsciously forms a defense system as well as disaster mitigation, including:

- Arrangement of settlements that separates between residential areas, storage areas/ *Leuit*, fields/ *Huma* with burning methods. This method is one of the preventing the spread of fire in the event of a fire because the locals using a material that is prone to fire to build a house and storage area (Figure 3).
- The residential area located at a higher ground contour than the river to prevent flooding (Figure 3).
- The structure and construction of buildings use a combination of natural materials, non-rigid structures (the use of tie systems, no nails, use of swear in the form of river stones) as mitigation of earthquakes and the application of breathing structures to regulate air circulation.
- Villagers and tourists are prohibited from using chemicals while in Baduy Dalam (Shampoo, soap, toothpaste, facial soap, laundry soap, etc.) so that the quality of water is maintained.
- Villagers and tourists can't use any gadgets and electronic devices.

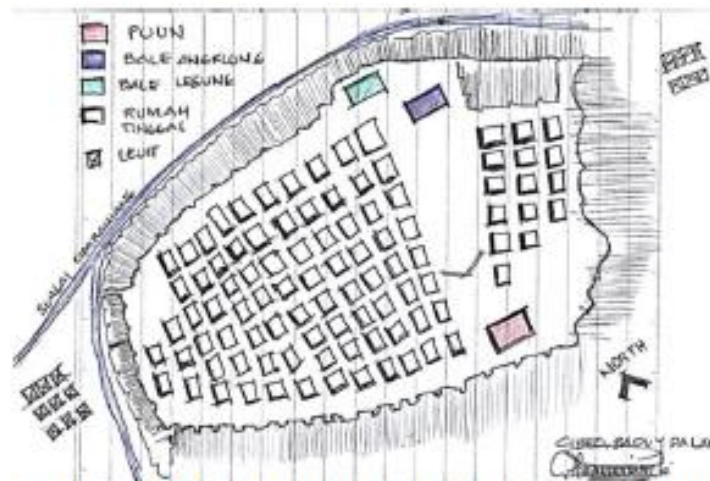


Figure 3. Spatial pattern of Cibeo Village, Baduy Dalam.
Source: Author, 2019

The residential building of the Cibeo Villagers is a breathing house type. The house is a stilt house with basic materials from woods for column (*tihang*) and doors. The roof covering (*hanteup*) using palm fiber (*ijuk*) with palm leaf (*rumbia*) as the base. Wall material uses bamboo webbing (*bilik*) which allows for air and light exchange (Figure 4).

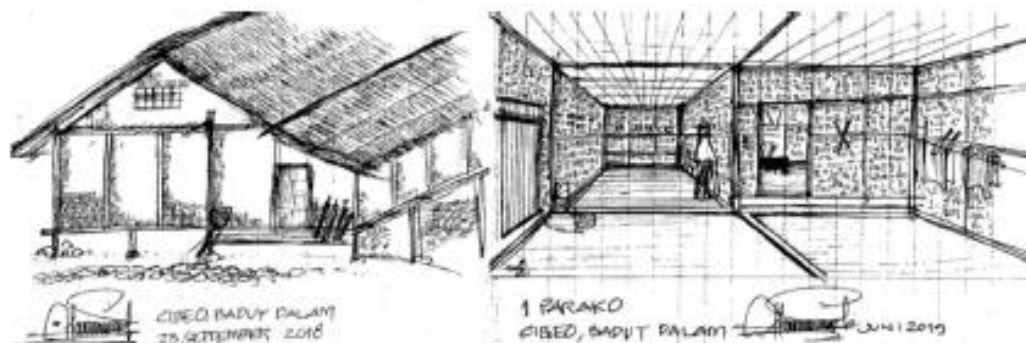


Figure 4. Breathing houses of Cibeo Villagers.
Source: Author, 2019

The house of Cibeo Villagers only have one partition in the main room (*Imah*). There are several types of houses, depending on the number of stoves (*parako*). A large number of stoves shows the number of families living in one house. For example, the house of the Syarif family (son of Puun Cibeo) has two Parakos because He and His Wife still stay with their parents (Figure 5).

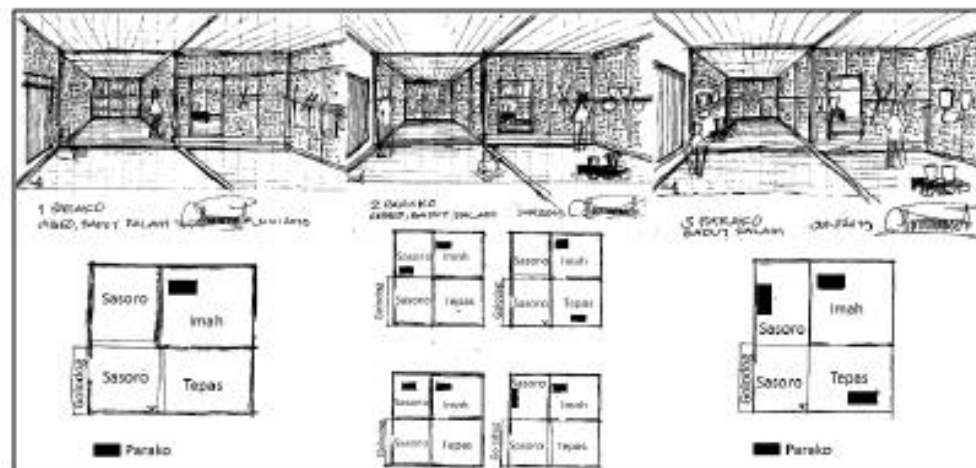


Figure 5. Several types of houses depending on the number of stoves (*parako*).

Source: Author, 2019

Every family in Cibeo can only have one residence. However, they are allowed to build *Saung* (smaller houses) in the fields. Each family has one or more *Leuit* to store the harvest. At certain times women will process rice from the harvest in *Bale Lesung*. Several families also have chicken coops. All of the supporting buildings are located close to the fields and separate from the residential area (Figure 6).

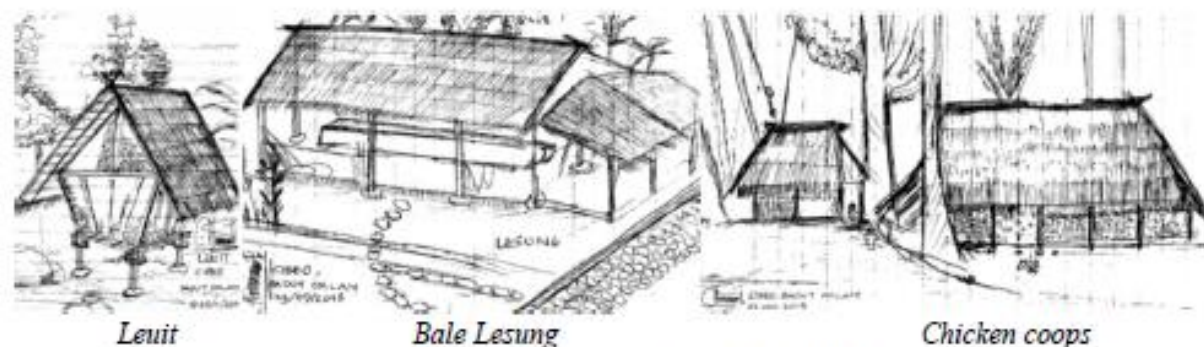


Figure 6. Supporting Facilities of Cibeo Villagers.

Source: Author, 2019

3.2. Social System of Cibeo Village, Baduy Dalam

The community of Cibeo Village, Inner Baduy is one of the images of indigenous people that still survive today. *Puun* is the highest leadership of the Baduy community whose authority of policy maker and fundamental rules for the teachings and customs of Sunda Wiwitan. *Puun* only exists in three Inner Baduy villages (Cibeo, Cikartawana, Cikeusik). Figure 7 shows the social structure of the Baduy community. There are two command lines, namely the traditional ceremonies and command line in the consultation. Mothers play an important role in the family. Villager usually call Men who already have children by the names of his children. For example, Kang Asmin has the first child named Raiti, then later he is better known as the *Father of Raiti*.

Father of Mursid (Son of the late *Puun* Jandol, Cibeo) give the general description of the social life of the Baduy community in the logbook of Matahari [16]:

"In Indonesia, there are many customs and cultures. But most are now extinct due to the pressure of global culture. We - the Baduy Tribe - still survive. As long as we are strong and united in holding on to adat, we will never lose".

"It could be that people outside the Baduy consider this tribe to be very backward, ancient, and even primitive. But if you want to look closely, that assessment will change. They are not ancient, backward, or even primitive people. They are people who are strong in upholding the principles of their lives, commitments with their ancestral customs".

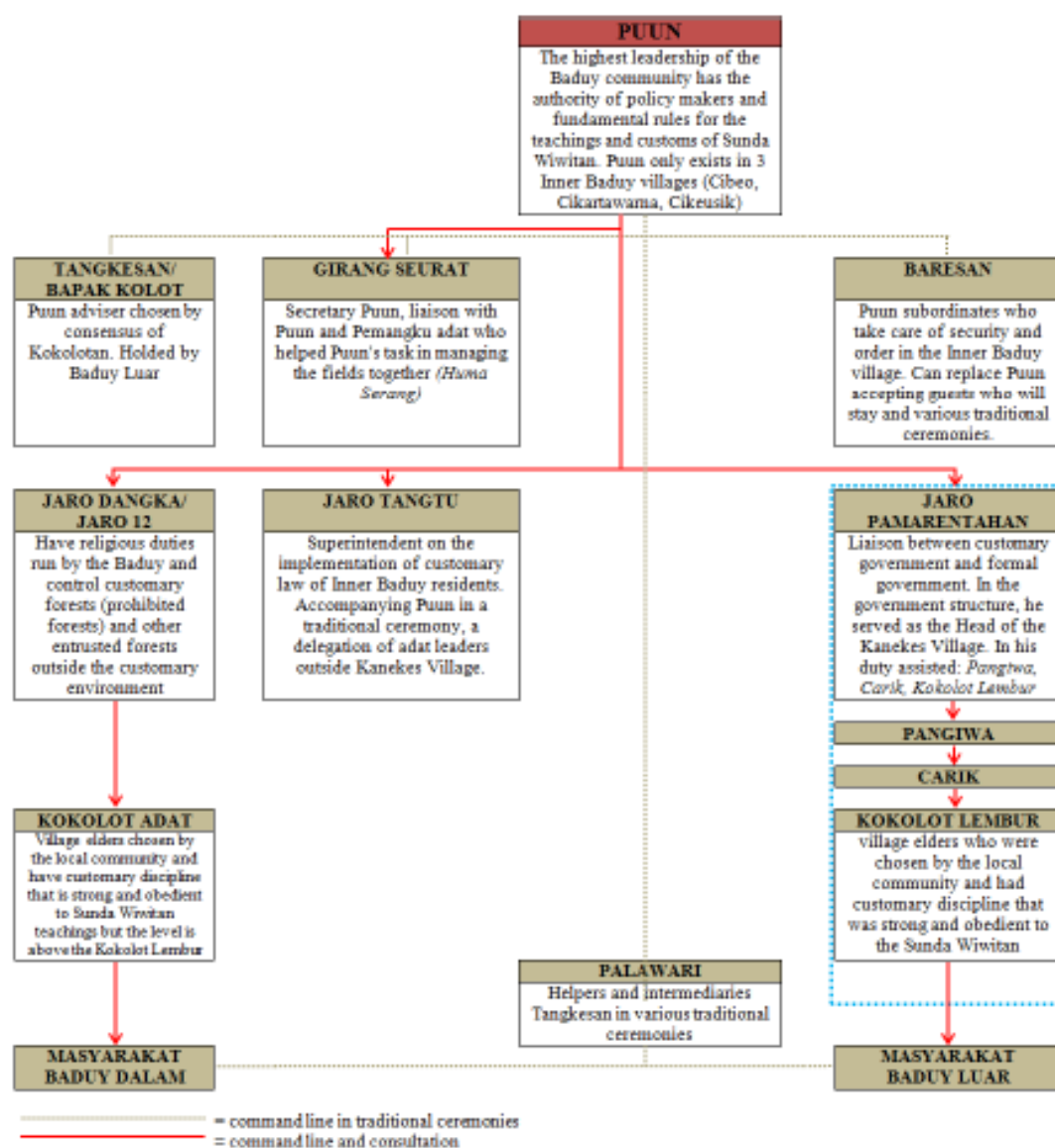


Figure 7. Social structure of Cibeo Villager, Baduy Dalam.

Source: Developed based on Permana, 2006 and Author Interviews, 2018 & 2019

The adjustment that occurs in the Baduy community is at the practical level, while the core of the customs and beliefs is maintained. Among other things, people's adherence to dressing (Figure 8), ownership of the houses and supporting building, not using chemicals, not using gadgets during Baduy Dalam, and tourists must follow the rule.



Figure 8. Clothes of Cibeo Villagers.

Source: (a) <https://www.romadecade.org/suku-baduy/>

(b) <https://gpswisataindonesia.wordpress.com/2015/02/01/tenun-baduy-tenun-banten/>

(c) Author, 2019

Bale, Imah and River Ciparahiang became an area for socialization with Baduy women. They tend to be quiet and not talkative and shy. Life in the river becomes a magnet for visitors, where visitors and residents bathe, wash, and walk in the river. Chat with Baduy women is an important source of information. They do not feel disturbed by the presence of visitors because they are accustomed, often they teach visitors how to bathe, wash, etc. especially for those who feel confused (Figure 9).



Figure 9. Bale, Imah, and River as social interaction for women.

Source: Author, 2019

The main livelihoods of Cibeo communities are farming. Some of the other livelihoods of Cibeo citizens include: making handicrafts from bamboo as a Baduy's souvenir, porters and road signer for visitors, honey-selling, and weaving (women only). Baduy men often sell honey to Jakarta, Bandung, Bekasi, Bogor on foot and barefoot (Figure 10).



Figure 10. Several kinds of Cibeo villager's livelihoods.

Source: (a, b, c, e, f) Author, 2019; (d) <https://travel.kompas.com/read/2019/02/13/091000127/kaki-kaki-telanjang-penaja-madu-baduy-di-jakarta?page=all>

3.3. Ethnic tourism and sustainable of vernacular settlement in Cibeo Village, Baduy Dalam

The government of Lebak Regency has established Kanekes Village as a tourist destination in 1992 and opened bus terminal in Ciboleger. It takes 4-6 hours to reach the Cibeo village from the entrance to Ciboleger on foot. The number of visitor to Kanekes Village (Baduy Dalam and Baduy Luar) over 15,000 people per year. Initially the Government of Lebak Regency handled the tourism management, but since year 2006 indigenous leaders of the Kanekes Village handled the tourism management. In November 2017 the Cijahe-Cibeo line was opened with trekking traveling time between 1.5 - 3 hours when the track is wet. The opening of the Cijahe-Cibeo line increases the number of visitors significantly because the trekking time is faster.

Based on Figure 11, there is a graph of the increase in the number of visitors. In the picture chart, there are quite striking differences between domestic and foreign visitors because the Cibeo Villagers still holds the belief that within the inner territory of all taboos is for non-Indonesian visitors to enter. Foreigner visitors can still explore villages in Baduy Luar.

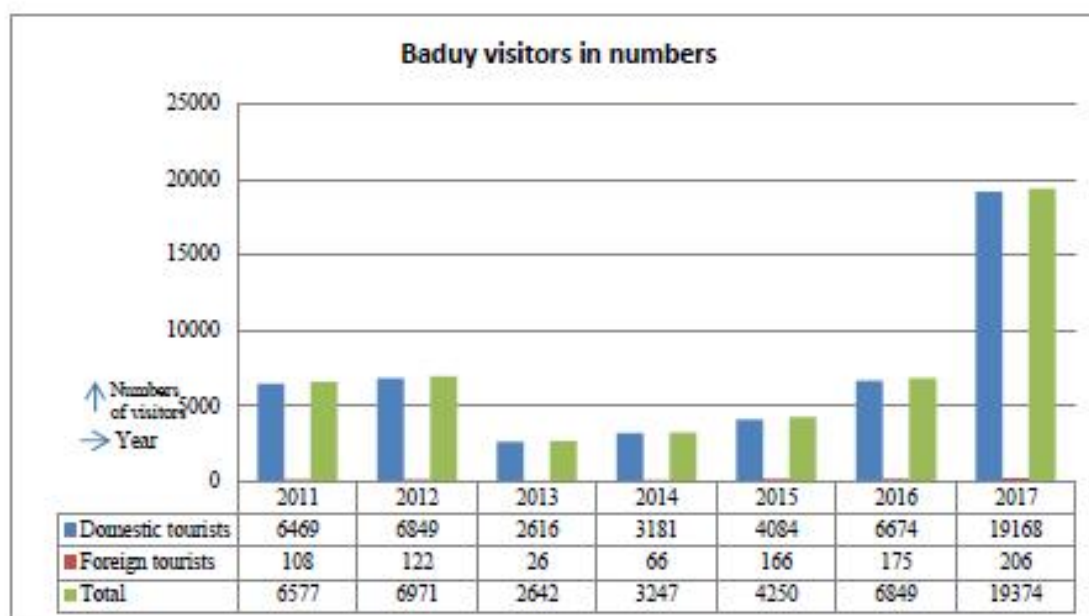


Figure 11. Baduy Visitors in Number Year 2011-2017.

Source: Information, Communication, Culture and Tourism Service of Lebak Regency; Camat Leuwidamar

All tourists have an opportunity to experience something unique to a given place not available elsewhere. The common activity of Baduy's Visitor are: sightseeing, making research (student or researcher), taking photographs, taking praying from *Pium*, and buying souvenirs. The tourists also

often involved the traditional life of the local community. In the past few years, more and more packages have been offered to the Inner Baduy also Seba Baduy which was held by the Banten Provincial Government as a symbol of gratitude for the harvest of the Baduy community (Figure 12).

There are some rules for visiting Cibeo Village, Baduy Dalam. Villagers and tourists are prohibited from using chemicals while in Baduy Dalam (Shampoo, soap, toothpaste, facial soap, laundry soap, etc.). Villagers and tourists can't use any gadgets and electronic devices. Villagers and tourists can not hunt and kill animals. Cibeo Villagers still holds the belief that within the inner territory of all taboos is for non-Indonesian visitors to enter. In *Kawalu* time (between February and April) Visitors can't visit inner Kanekes.



Figure 12. Some advertisements about ethnic tourism to inner Baduy.

Source: <https://haraduta.com/open-trip-baduy-dalam/>

<https://www.baduycorner.com/>

<https://kilikili-adventure.com/trips/open-trip/baduy-dalam/open-trip-baduy-dalam-2019-part-1>

<https://wisatahalimun.co.id/paket-tour-baduy-lebak-banten>

<https://bantensatu.co/2017/08/07/genjot-wisata-asppi-banten-akan-gelar-baduy-travel-mart/>

The impact of tourism on indigenous cultures often produces a social situation in which local people alter their lives to suit the demands of tourists. As noted above the particular aspects of local culture most sought by tourists are often theorized as resulting in 'staged authenticity'; a cultural performance molded to suit tourists and tour operators, but devoid of its indigenous cultural meanings [12]. But ethnic tourism in Cibeo village is different because close to "cool authenticity" tourism. According Selwyn in Jingjing [12], differentiates between "cool authenticity", which refers to the real, original, or genuine and "hot authenticity", which refers to the accepted but enjoyed fake version.

Timothy [13] suggests that ethnic culture is not only reproduced to meet the demands of commodity production but also to contribute to the cultural construction of alternative modernity. The author agrees with this opinion because the vernacular settlement sooner or later will be sure to intersect with modernism. The most important thing is to create a system of sustainability from the vernacular settlement. tourism becomes a factor in the ongoing construction of place identity and does not break down a place-based sense of identity or render it inauthentic. Governments and entrepreneurs have the powers in developing ethnic tourism in Cibeo village, but the most important for sustainable vernacular settlement is ethnic communities itself.

Ethnic tourism in Cibeo villages appealing several people prefer to be together with people in their cultural landscape, and try to live contenting themselves with what nature has given. The visitors using the vernacular housing units who prefer to enjoy the experience of vernacular culture. It means that

vernacular architectural seem to be capable of making a contribution to ethnic tourism in Cibeo village, Baduy Dalam.

Based on Michael [17], Politicization of religion instrumentalized to articulate ethnic and binding on society. Author agrees with Michael that politicization of religion also applies in Cibeo village, Baduy Dalam where cultur rules still strongly bind villagers and tourists. Although tourists using Cibeo Villagers houses as lodging, but there are no changes in spatial patterns, structures of residential construction, and materials used. Everyday people's adherence to dressing. Villagers and tourists are prohibited from using chemicals while in Baduy Dalam (Shampoo, soap, toothpaste, facial soap, laundry soap, etc.) so that the quality of water is maintained. Villagers and tourists can't using any gadgets and electronic devices.

Author agrees with Timothy [13] that the process of commercialism and cultural integration associated with tourism becomes a factor in the ongoing construction of place identity and does not break down a place-based sense of identity or render it inauthentic. A broader set of political, economic, and cultural processes built place-based identity. In many places in Asia, tourism has become an example of these processes. They injecting a new set of conditions into local expressions of identity and sense of place. Locals have quickly learned to appropriate the tourist experience in their claims of place identity. Tourism is a powerful social and cultural force. Broader historical processes, such as: commercial trade, military campaigns, state revenue collection or political campaigns, and foreign missionaries have conditioned local actors in constructing their senses of place.

4. Conclusions

Ethnic tourism in Cibeo village is close to "cool authenticity" tourism, which refers to the real, original, or genuine. The key to the success of the sustainability of an indigenous village community and its architecture in Cibeo village, Baduy Dalam is the growth and development of its local wisdom. Cultural rules instrumentalized to articulate ethnic and binding on society. Sustainability of their vernacular settlement done by its community itself that protected by customary rules. Tourism plays an important role as a factor in the ongoing construction of place identity and does not break down a place-based sense of identity or render it inauthentic. Ethnic tourism becomes a factor in the ongoing construction of a place identity and senses of place of vernacular settlement in Cibeo Village. This study provides implication: First, that cultural system carried out by vernacular society determine sustainable of vernacular settlement. Second, that the key of successful Sustainable Vernacular Settlement is the growth and development of its local wisdom.

References

- [1] Kayoko I 2012 The impact of ethnic tourism on hill tribes in Thailand, *Annals of Tourism Research* 39, 290-310
- [2] Li Y 2011 Ethnic tourism and cultural representation *Annals of Tourism Research* 38, 561-585
- [3] Li Y 2014, Ethnic tourism, *Encyclopedia of Tourism* ed J. Jafari and H. Xiao (Springer International Publishing Switzerland) pp. 80-1 DOI 10.1007/978-3-319-01669-6_80-1 https://link.springer.com/content/pdf/10.1007/978-3-319-01669-6_80-1.pdf
- [4] Amos R 1982 *The Meaning of the Built Environment: A Nonverbal Communication Approach* (Arizona: The University of Arizona Press)
- [5] Martinus B S 2013 *Arsitektur Vernakular: Keberlanjutan Budaya di Kampung Bena Flores* (Sukoharjo: Padepokan Seni Djayabhinangun)
- [6] Octavianus H A R 2011 *Arsitektur Vernakular: Patutkah Didefinisikan?* *J. Sabua* 3, 32-39
- [7] Suha O 2006 Traditionalism and vernacular architecture in the twenty-first century *Vernacular Architecture in The Twenty-First Century: Theory, education and Practise* ed L Asquith and M Vellinga (London: Routledge) chapter 5 pp 97-109
- [8] Muhammar K 2016 The Effects of Tourism on Vernacular Houses In Traditional Village: The Comparison Between Kampung Naga In West Java and Desa Kanekes In Banten *J. Arsitektur NALARs* 15, 141-148

- [9] Hacer M D and Meryem A 2014 Rural Tourism and Vernacular Architecture: An Example from Elmalı, Antalya, *American International Journal of Contemporary Research* **4**, 69-71
- [10] Roxana W 2009 *The Living House: An Anthropology of Architecture in South-East Asia* (Singapore: Tuttle Publishing) p 96
- [11] Cecep E P 2006 *Tata Ruang Masyarakat Baduy* (Jakarta: Wedatama Widya Sastra)
- [12] Jingjing Y, Chris R, Lingyun Z 2016 Impersonation in ethnic tourism-The presentation of culture by other ethnic group, *Annals of Tourism Research* **56**, 16-31
- [13] Timothy S O 1997 Ethnic Tourism in Rural Guizhou: Sense of Place and the Commerce Of Authenticity *Tourism, Ethnicity, and the State in Asian and Pacific Societies* ed M Picard and R E Wood (Honolulu: University of Hawai'i Press) chapter 2 pp 36-70
- [14] Linda G and David W 2002 *Architectural Research Methods* (Canada: John Wiley & Sons, Inc.) p 180-186
- [15] Cecep E P 2010 *Kearifan Lokal Masyarakat Baduy Dalam Mitigasi Bencana* (Jakarta: Wedatama Widya Sastra)
- [16] Matahari T 2008 *Biarkan Baduy Bicara: Catatan Perjalanan* <https://archive.org/details/BiarkanBaduyBicara> accessed June 27, 2019
- [17] Michel P 2017 Introduction: Local Traditions and World Religions. Encountering 'Religion' in Southeast Asia and Melanesia *The Appropriation of Religion in Southeast Asia and Beyond* ed M Picard (Cham: Palgrave Macmillan, Springer International Publishing AG) chapter 1 pp 1-38