

## International Conference on Engineering and Technology Development



# 3<sup>rd</sup> ICETD 2014

28, 29 October 2014, Bandar Lampung, Indonesia

Hosted By :

Faculty of Engineering and Faculty of Computer Science  
Bandar Lampung University, Indonesia



In cooperation  
with :



THE UNIVERSITY OF KITAKYUSHU



الجامعة الإسلامية العالمية  
INTERNATIONAL ISLAMIC UNIVERSITY MALAYSIA  
بوتانسيه الاسلاميه العالمية

# 3<sup>rd</sup> ICETD 2014

THE THIRD INTERNATIONAL CONFERENCE  
ON ENGINEERING AND TECHNOLOGY DEVELOPMENT

28 -29 October 2014  
Bandar Lampung University (UBL)  
Lampung, Indonesia

## PROCEEDINGS

Organized by:



Faculty of Computer Science and Faculty of Engineering  
Bandar Lampung University (UBL)  
Jl. Zainal Abidin Pagar Alam No.26 Labuhan Ratu, Bandar Lampung, Indonesia  
Phone: +62 721 36 666 25, Fax: +62 721 701 467  
website : [www.ubl.ac.id](http://www.ubl.ac.id)

## **PREFACE**

The Activities of the International Conference is in line and very appropriate with the vision and mission of Bandar Lampung University (UBL) to promote training and education as well as research in these areas.

On behalf of the Second International Conference on Engineering and Technology Development ( 3<sup>rd</sup> ICETD 2014) organizing committee, we are very pleased with the very good response especially from the keynote speaker and from the participants. It is noteworthy to point out that about 80 technical papers were received for this conference.

The participants of the conference come from many well known universities, among others : University Kebangsaan Malaysia – Malaysia, IEEE – Indonesia, Institut Teknologi sepuluh November – Indonesia, Surya Institute – Indonesia, International Islamic University – Malaysia, STMIK Mitra Lampung – Lampung, Bandung Institut of Technology – Bandung, Lecture of The Malahayati University, B2TP – BPPT Researcher – Lampung, University of Kitakyushu – Japan, Gadjah Mada University – Indonesia, Universitas Malahayati – Lampung, Lampung University – Lampung,

I would like to express my deepest gratitude to the International Advisory Board members, sponsor and also to all keynote speakers and all participants. I am also grateful to all organizing committee and all of the reviewers who contribute to the high standard of the conference. Also I would like to express my deepest gratitude to the Rector of Bandar Lampung University (UBL) who give us endless support to these activities, so that the conference can be administrated on time

Bandar Lampung, 22 October 2014

Mustofa Usman, Ph.D  
3<sup>rd</sup> ICETD Chairman

# PROCEEDINGS

## 3rd ICETD 2014

The Third International Conference  
On Engineering And Technology Development

28 -29 October2014

### INTERNATIONAL ADVISORY BOARD

Y. M Barusman, Indonesia

Ahmad F. Ismail, Malaysia

Mustofa Usman, Indonesia

Moses L. Singgih, Indonesia

Andreas Dress, Germany

Faiz A.M Elfaki, Malaysia

Warsono, Indonesia

Raihan Othman, Malaysia

Zeng Bing Zen, China

Tjin Swee Chuan, Singapore

Khomsahrial R, Indonesia

Rony Purba, Indonesia

Hon Wei Leong, Singapore

Imad Khamis, USA

Rozlan Alias, Malaysia

Rudi Irawan, Indonesia

Gusri Ibrahim, Indonesia

Jamal I Daoud, Malaysia

Riza Muhida, Indonesia

Heri Riyanto, Indonesia

Agus Wahyudi, Indonesia

# PROCEEDINGS

## 3<sup>rd</sup> ICETD 2014

The Third International Conference  
On Engineering And Technology Development

28 -29 October 2014

### STEERING COMMITTEE

#### Executive Advisors

Dr. M. Yusuf S. Barusman  
Andala R. P. Barusman, MA.Ec

#### Chairman

Mustofa Usman, Ph.D

#### Co-Chairman

Dr. Ir. Hery Riyanto, MT  
Ahmad Cucus, S.Kom., M.Kom

#### Secretary

Yuthsi Aprilinda S.Kom., M.Kom  
Marzuki, S.Kom., M.Kom  
Maria Shusanti Febrianti, S.Kom., M.Kom

#### Technical Committee

Robby Yuli Endra, S.Kom., M.Kom  
Sofiah Islamiah, ST, MT  
Fenty Ariani, S.Kom., M.Kom  
Taqwan Thamrin, ST., MSc  
Dina Ika Wahyuningsih, S.Kom  
Agus Sukoco, M.Kom  
Hj. Susilowati, ST, MT  
Haris Murwadi, ST, MT

#### Treasure

Samsul Bahri, SE  
Dian Agustina, SE

# PROCEEDINGS

## 3<sup>rd</sup> ICETD 2014

The Third International Conference  
On Engineering And Technology Development

28 -29 October 2014

### ORGANIZING COMMITTEE

#### Chair Person

Dr. Ir. Hery Riyanto, MT

#### Vice Chair Person

Ahmad Cucus, S.Kom., M.Kom

#### Treasure

Dian Agustina, S.E

#### Secretary

Robby Yuli Endra, S.Kom., M.Kom

Sofia Islamiah Izhar, S.T., M.T.

Taqwan Thamrin, ST., MSc

Erlangga, S.Kom., M.Kom

Iwan Purwanto S.Kom., MTI

#### Special Events

Agus Sukoco, M.Kom

Dra. Yulfriwini, M.T.

Ir. Juniardi, MT

Ir. Indra Surya, MT

Ir. Najamudin, MT

Kunarto, ST. MT

IB. Ilham Malik, ST. MT

Ir.A Ikhsan Karim, MT

Usman Rizal, ST., M.MSi

Ir. Sugito, MT

Berry Salatar, S.Pd

Ayu Kartika Puspa S.Kom., MTI.

Helta Anggia S.Pd., MA

Yanuaris Yanu Darmawan SS. M.Hum

#### Receptionist

Indyah Kumoro K.W., S.T., IAI.

Haris Murwadi, S.T., M.T.

**Transportation and Acomodation**

Irawati, SE  
Desi Puspita Sari, S.E  
Ifa Ditta, S.E., S.T.P  
Riffandi Ritonga, S.H.

**Publication and Documentation**

Ir. Indriati Agustina Gultom, M.M  
Noning Verawati, S.Sos  
Hesti, S.H  
Masitoh S.Sos

**Consumption**

Susilowati, S.T., M.T  
Yuthsi Aprilinda S.Kom., M.Kom  
Maria Shusanti Febrianti, S.Kom., M.Kom  
Fenty Ariani, S.Kom., M.Kom  
Reni Nursyanti, S.Kom., M.Kom  
Sundari, S.Kom

**Facility and Decoration**

Siti Rahma Wati, S.E.  
Dina Ika Wahyuningsih, S.Kom.  
Arnes Yuli Vandika, S.Kom, M.Kom.  
Zainal Abidin, S.E.  
Ahyar Saleh, S.E.  
Eko Suhardiyanto  
Wagino  
Sugimin

## Table Of Content

No	Title	Author	Page
1	The Influence Of Implementing Information Technology On Knowledge Management Toward Performance Evaluation Using Balanced Scorecard	Sarjito Surya	1-3
2	Implementation Of Customer Relationship Management (Crm) To Automate Logging Track Record Students And Alumni	Robby Yuli Endra <sup>#1</sup> Fenti Aryani <sup>*2</sup> Septiany Dian Puspita <sup>#3</sup> Ade Kurniawan <sup>*4</sup>	4-10
3	Prototype Model Classification System Level Internal Audit Findings Based On Case-Based Reasoning In Education Quality Management	Marzuki <sup>#1</sup> Maria Shusanti Febrianti <sup>*2</sup>	11-13
4	Implementation Case Based Reasoning In Determining The Rational Prescription Of Tb Drugs	Ahmad Cucus	14-19
5	Implementation Of Workflow Management System On E-Learning Platform For The Effectiveness Of Distance Learning	Yuthsi Aprilinda <sup>#1</sup> Agus Sukoco <sup>*2</sup> Ahmad Cucus <sup>#3</sup>	20-25
6	Thermal Bioclimate For Tourism: Case Study Of Kuta, Bali Province, Indonesia	Nyoman Sugiarta <sup>#1</sup> Andreas Matzarakis <sup>#2</sup>	26-32
7	Minimum System Design Of Android Based Pstn Phone	Deo Kiatama <sup>#1</sup> Fransiscus Ati Halim <sup>*2</sup> Arnold Aribowo <sup>#3</sup>	33-38
8	The Design Of Pressing Equipment For Banana Fruit	M.C. Tri Atmodjo	39-44
9	Modelling Supply Chain Management In B2b E-Commerce Systems	Idris Asmuni	45-51
10	Extreme Programming Study Method Case Study On Designing Of Accounting Term Dictionary	Usman Ependi <sup>#1</sup> Qoriani Widayati <sup>*2</sup>	52-55
11	Review On Economic Valuation Of Solid Waste Management In Bandar Lampung, Lampung	ling Lukman <sup>#1</sup> , Diah Ayu Wulandari Sulistyaningrum <sup>*2</sup> , Taqwan Thamrin <sup>#3</sup>	56-57



No	Title	Author	Page
12	Prototype Topology Sdn For Simple Network Campus	Arnesyulivandika	58-61
13	Tsunami Force On A Building With Sea Wall	Any Nurhasanah <sup>#1</sup> Nizam <sup>*2</sup> Radianta Triatmadja <sup>#3</sup>	62-64
14	Analysis The Quality Of Website Service Information System Academic Integrated ( Siater ) Bandar Lampung University Using Pieces Methods	Yusinta Ria Disanda	65-71
15	Organize Bad Manual Financial Database Of Educational Organization By Bank To Decrease Financial Criminalize	Ruri Koesliandana <sup>#1</sup> Eka Imama Novita Sari <sup>*2</sup> Arnes Yuli Vandika <sup>#3</sup>	72-74
16	Design Of Lampung Bay Waterfront Using Poetic Architecture Approach	Shofia Islamia Ishar, S.T.,M.T. Muhammad Syahroni, S.T.	75-83
17	Analysis Limiting Internet Sites With The Method Using Squid Proxy Server At Smkn 1 South Rawajitu	Reni Tri Astuti	83-88
18	Effect Of Grading On Differences Using Mixed Concrete Aggregate Rough And Fine Aggregate Concrete Compressive Strength Of Natural	Yulfriwini	89-97
19	Analysis Quality Dino Tour Travel Management Website Using Webqual 4.0	Rola Hengki	98-105
20	Holonic Manufacturing System: Current Development And Future Applications	Moses Laksono Singgih	106-113
21	An Analysis Perspective Implemented Text Mining Analytics Information Extraction For Impact Of Indonesian Social Media	Agus Suryana.Mti <sup>#1</sup> Sri Ipnuwati.M.Kom <sup>*2</sup>	114-123
22	Study Of Gold Mine Tailings Utilization As Fine Aggregate Material For Producing Shotcrete Based On Concept Of Green Technology	Lilies Widodojoko <sup>1)</sup> Harianto Hardjasaputra <sup>2)</sup> Susilowati <sup>3)</sup>	124-133

No	Title	Author	Page
23	Decision Support System For Determined Recommendations Lecturer Teaching Handbook Using Fuzzy	Usman Rizal <sup>#1</sup> Fenti Aryani <sup>*2</sup>	134-140
24	The Expert System Software Application On Lecture Scheduling Based On Rule Based Reasoning	Taqwan Thamrin <sup>#1</sup> Ahmad Cucus <sup>*2</sup> Adi Wijaya <sup>#3</sup>	141-144
25	Portal Website Analysis Using Iso / Iec 9126-4 Metric Effectiveness (Case Study Indonesia Wi-Fi Portal Website)	Refky Jumrotuhuda	145-149
26	Student Satisfaction Analysis Of Siater Using End User Computing Satisfaction (Eucs)	Erlangga, Jefri Krisna Putra	150-155
27	Urban Tourism Development Through Low Impact Development (Lid) Towards Green-Tourism	*Iir. Wiwik Setyaningsih, Mt *Ztri Yuni Iswati, St., Mt, *Zsri Yuliani, St., M.App.Sc.	156-161
28	Hawkers Empowerment Strategy To Promote Sustainable Economy In Surakarta	Murtantjanirahayu Rufiaandisetyanaputri	162-172
29	New Urbanism: A Comparative Analysis Between Traditional Village And Housing Estate	Bhakti Alamsyah	173-179
30	Traditional Market Revitalization As An Urban Catalyst In The City Of Surakarta	Istijabatul Aliyah #1, Bambang Setioko #2, Wisnu Pradoto #3	180-188
31	The Robinson Mall Impact On Fv And Ds In Zapa Street, Bandar Lampung City	Ida Bagus Ilham Malik Ilyas Sadad	189-195
32	Decision Support System For Mall Nutrition Using Simple Additive Weighting (Saw) Method	Reni Nursyanti Mujasih	196-200
33	Effect Of Cement Composition In Lampung On Concrete Strength	Heri Riyanto	201 – 204

No	Title	Author	Page
34	E-Archive digital storage media	Arnes yuli vandika, ade kurniawan, ari kurniawan	205 -207
35	Virtualization Technology for Optimizing Server Resource Usage	Edwar Ali, Didik Sudyana	208 - 212
36	Decision Support System (DSS) For The Determination Of Percentage Of Scholarship Quantity Based Fuzzy Tahani	Robby Yuli Endra #1, Agus Sukoco #2	213 -223
37	Evaluation of Pedestrian Way's Comfort Case Study: Jl. Z. A. Pagar Alam, Bandar Lampung	Haris Murwadi 1*, Fritz Akhmad Nuzir 2	224 - 228
38	Modification Effect Of Volume Cylinder Four Stroke Engine To Effective Power	Ir. Najamudin, MT	229-239
39	Impact Of Motor Vehicle Emissions On Air Quality In Urban And Sub Urban Area ( Case Study: Bandarlampung City)	Ir. A. Ikhsan Karim, MT., Ir. Sugito, MT	240-249

# NEW URBANISM: A COMPARATIVE ANALYSIS BETWEEN TRADITIONAL VILLAGE AND HOUSING ESTATE

Bhakti Alamsyah

Ir, M.T., Ph.D.,

Lecturer at the Architecture Engineering Program

University Pembangunan Panca Budi Medan

(e-mail: [hendysaleh29@pancabudi.ac.id](mailto:hendysaleh29@pancabudi.ac.id)).

*Abstrac - Rapid urbanization has been a critical issue to urban environments. The immediate and most critical urban environment problems faced by several cities, such as Jakarta and Surabaya, are drinking water, sanitation, traffic and industrial pollution, land degradation, and traffic congestion. It is believed that New Urbanism is thought to be an alternative approach to address the above issues. This paper also discusses the physical and social character of two settlement i.e. housing estate and traditional village. The comparative analysis will be discussed further by using case studies. Consequently the issues on New Urbanism will be related to the other aspect of new development in the future.*

**Keywords: housing estate, Traditional village, New Urbanism.**

## INTRODUCTION

In the year 1990, resident of Indonesia which live in urban is equal to 30,9% from amount of residents and will mount in the year 1995 estimated to reach 35%. While according to projection of Bappenas, in the year 2000 townees amount will become 40% and 55% in the year 2010. Improvement of this remarkable residents amount isn't it the problem of for town environment which is ordinary to be referred as also as problem which " is tan", like lack of clean water and obsolence of condition of sanitasi, problem of dismissal of dangerous and solid garbage, air pollution of motor vehicle and industry, isn't it which because of and jam of density, domination of farm, loss of cultural resource and open space.

For example, quality of water in town of Jakarta very where 90 % of natural well of river and contamination of Ciliwung improper as standard water source ( Nugroho, Kompas 23 May 2001). Effect of this environmental problems have to be paid with high expense, according to

World Bank report, in the year 1990 health expense to be paid by resident of Jakarta in consequence of air pollution is equal to US dollar 500 million.

Environmental problems in urban, have triggered appearance awareness of development of town will going concern. One of the movement development of going concern settlement or town is New Urbanism expanding in United State of America. This Movement believe that with settlement of settlement area lessening usage.

Pursuant to soul of movement of New Urbanism, writer try to depict the condition of social and physical development of settlement in Indonesia especially in metropolises like Jakarta and of Surabaya. Discussed in Settlement is this writing divided in two group that is " local", settlement which there are and expand since the have expanding to of towns in Indonesia that is Kampong. Second is " which is immigrant" is incoming settlement or developed later then that is real estate.

Result under consideration this, expected can useful as new inputs or discourse in going concern urban development in Indonesia.

## MOVEMENT OF NEW URBANISM IN UNITED STATE.

Since World War Of II, in marginal United States area of town is most residence enthused. This matter is enabled by growth of invention of car and road-works of toll making an opening for society to move from downtowns to town boundary. Suburban housing give some life freshment, but growth which so quickly generate some problems.

Existing problems like intricate of development between area which is one otherly, loss of "sense of place", detached dweller from beseting housing of him, green air-gap turn into shop, housing, and place park, area which is insulation improve depend on usage of car and cause the problem of air pollution and jam. Realizing this problems,

hence planner of town start to look for new solutions, like movement of New this Urbanism.

#### History Growth of New Urbanism.

New Urbanism often is also referred as also for example as Traditional Neighborhood Development (TND), planning of neotradisional, Transit-Oriented-Development (TOD), or solid development concept (Compact Development). This Movement emerge in around the year 1980 as an alternative of conventional development concept in settlement of town boundary. Along with growth of socialization conception this, in the year 1989 Institution of Traditional Neighborhoods publish an national version for the standard of planning of TND to be introduced to town councils. Is later then formed an recognized organization by the name of *Congress for the New Urbanism* (CNU). At meeting of congress of is four in year 1996, all participants of congress agree to make Treaty of New Urbanism concerning principle, policy, technique and guidance of design.

This movement believe that concept planning of neotradisional can finish the problem of development of not regular town boundary or conventional approach in development. Conception this neotradisional relate at old town characters, like small plot of land, GSB the shortness, next terrace, public room which many, usages of farm of multi function, narrow;tight road;street and interaction, which there are in town of Charleston, Carolina South, Old Town of Alexandria, Virginia and of Marblehead, Massachusetts. Movement which of a kind also is expanding in Europe that is The Urban Villages Forum in English and of The European Sustainable Cities Campaign.

#### Principles Planning and Scheme of New Urbanism.

New Urbanism hold on to some matters that is

1. Downtown restoration and existing town in a[n] unity of metropolitan region
2. Re-Pembentukan area settlement of spasmodic town boundary become a[n] real society environment and multifarious canton [of] function
3. Environmental conservation of nature
4. Continuation of ommission beset brand
5. Environmental of society have to multifarious in usage of farm and his dweller
6. Society environment have to be designed for pedestrian off[is including also vehicle of car and public
7. Town have to be formed by clear physical form and keep handy public room
8. Town place have to be formed by architecture desain and of lansekap esteeming local history, climate, ecology, and development practice.

In general, New Urbanism hold on to scheme principles as follows

1. Usage of farm of multi multifarious housing type and function. Integration usage of commercial farm and housing, shop and white colars of environmental scale at housing area susdut. With function multi, entire/all everyday requirement for dweller can fulfill by dala one area, so that will lessen traffic jam. With house type which all kinds of, expected can lessen social difference between rich with impecunious
2. High density. A solid housing area (compact) with environmental medium (shop and white colars) and place of transit public which can reach walked (conception pedestrian of pocket), with optimal radius ¼ mile or 400 metre. To cut short distance reach to environmental center, hence wide of plot of land minimized and developed vertical housing
3. Public Rooms amount which more and locations of house which each other near by and also closed to road;street to create better social interaction between dweller.
4. Street network which is is continued to be enabled with chessboard pattern (gridiron) so that give alternative route for motor vehicle. Pattern walke grid is road;street which penetrate to be believed by more "democratic" because giving bigger opportunity to dweller to participate in social interaction
5. Desain orient at pedestrian, in the form of pavement in gangway and road;street which lay between house backyard, especially to reach place of transit vehicle of public and lessen depend on motor vehicle. To create brotherly pavement, hence road;street narrowed, reboisation of road;street, lessening GSB, house have next terrace;core to and place garage [in front/ahead] of house plot of land. With condition like this, and also wide of small plot of land and high density, hence in the end natural conservation, environmental pollution and expense efficiency will reach decreased him exploiting of farm and usage of motor vehicle.

At the moment in United States have expanded more than one hundred planned real estate is bepedoman at movement of New Urbanism (Tu and of Eppli: 1999, matter. 426). One of the example of of real estate applying concept of TND or principles of New Urbanism is housing of Northwest Landing [in] town of Du Pont, Washington planned by Perter Calthorpe in the year 1995. Housing area for the width of 1.200 ha this designed by function multi besides single house there are also rent apartment and kondominium (principal of high density and mixed-use), distance reach for pedestrian to publik utilities (principal of pedestrian of pocket), principal of community interaction with visible individuality of house front in the form of terrace;core, garden and also air-gap like footpath and marsh in each environmental unit of housing is 40% from wide of farm (principal of natural conservation)<sup>1</sup>.  
Figures of New Urbanism

Some figures in this movement is Peter Calthorpe, Andres Duany and Elizabeth Plater-Zyberk. Calthorpe as a

practitioner designer of town which have kuliah in University architecture majors of Yale (1975), working for state architect part of Kalifornia that is Sim Van der Ryn. Both together write book concerning diesel fuel architecture entitle "Sustainable Communities." In the year 1989, first real estate which planned by him with concept of TOD is Lagoon of West for the width of 3.300 acre provided system of pedestrian the directionality with duration walk maximum 10 minute to reach vehicle of public, house design with next terrace so that unmate can sit and address late other citizen, and downtown in the form of open garden of green as society centre of activities.

Besides Lagoon of West, some town areas and real estate developed by Calthorpe is Sacramento, San Ego, Brentwood in California, Portland in Oregon, and " Green City" in Philipina with ecology principle like natural drainage system. In town of Portland - Oregon, conception TOD applied to prevent development of housing with suburban low density. With development of settlement of high density specially [at] area of transit (area for the width of 20-65 ha able to be gone through by 10 minute by or pedestrian of radius 700 metre), hence will be of benefit to protection of environmental resource decreased him exploiting of farm<sup>2</sup>.

Magnate of TND other is husband/wife spouse of Andres Duany and of Elizabeth Plater-Zyberk. Both is grad architect of Princeton and of Yale is which is very influenced by views of Leon Krier, a architecture theorist of Europe. According to Krier, towns in West world have experienced of a period of bleak since a period of industrial revolution, dissociation of usage of farm (single function) naturally is anti-ekologi and have to change with planning of traditional town which comprehend rights each;every human being to reach all functions life of town walked.

Some housing areas planned by Duany is Kentland, Maryland (150 ha), Blount Spring, Alabama (185 ha), Bedford, New Hampshire, Belmont Forest, Virginia (112 ha), and Gaithersburg, Maryland (145 ha), Seaside, The Strait of Florida (32 ha). To apply TND in Seaside, Duany apply planning standard, like 5% farm for publik utilities and one special special plot of land among others for the place of penitipan of child, pattern walke gridiron, small street widely ROW 7 metre and park in one of the roadside, block angle;corner radius may not exceed 8 metre (keen angle;corner will slow down speed of vehicle), farm park beside or plot of land front, there are gangway and pedestrian, house with next terrace.

#### Criticism To New Urbanism

Conception New Urbanism for solution of [is] problem of town boundary have getting credit many from various partys, like architect, planolog, environmental observer, and governmental bureaucrat. But, this movement also accept criticism berepa for example

1. More make account of visible things or looked to be by fisik and forget public spirited things, economics and politics

2. In fact, many real estate with concepts of TND difficult to create usage of farm which is function multi for forming an community.
3. Consumer not give a dam by what on the market by all urbanist new but conventional concepts which orient at vehicle of motors<sup>3</sup>. All consumers especially middle-weight still interest with wide of plot of land, low density and single farm function, while all developers it is of course for the shake of advantage have to fulfill this desire. Other constraint is doubtfulness of consumer concerning security problem with gangway concept rear house plot of land
4. Is not lessen traffic jam, even on the contrary possibly will create traffic jam, because range distance which is near by will lessen traveling expense mean, cheap traveling expense of tend to will add the amount of journeys and improve totalizing of kilometre apart journey.

In fact, some projects applying concept of TND this cannot reach target initially that is housing which was inklusif but housing which was eksklusif for middle-weight to the, like some real estate [in] Austin towns, Texas that is Spring Hollow Farm, New Commerce Village, City Of Immortals<sup>4</sup>. The One of the case is project of delayed TND because opposed by society are housing of suburban Lakeside of Dallas, Texas planned by Andres Duany and of Elizabeth Plater-Zyberk in the year 1994. At this case, society around project of Lakeside objection with housing plan with high density that is apartment 5-6 floor, where their assumption that apartment will generate criminality, hardness, gang, and finally degrade value sell properti at his ambient<sup>5</sup>. Facing this criticism, figure of New Urbanism, Peter Calthorpe, having a notion that " developing a[n] community are an phenomenon 200 year."

#### REAL ESTATE AND KAMPONG.

" Which is Immigrant" and " Local"

Initially, settlement which in towns in Indonesia is area perkampungan of local resident which live in commerce distribution service nodes and transportation that is like market, riverbank, river estuary, main road edge. Economic activity share big in growth of town, hence along with growth of commercial activity happened continuous resident accumulation increase to form a[n] community " local". Till now, history perkembang of settlement of kampongs [in] mirror distribution service nodes of kampong names like Pasar Senen, Pasar Minggu, Pasar Jumat, Pasar Ikan and Sunda Kelapa in town of Jakarta and so called kampong name of Pasar Genteng, Pasar Wonokromo, Pasar Keputran and Pasar Pucang in town of Surabaya.

At a period of Planting To Force (Tanam Paksa in The Culture System, 1830-1870), towns in Indonesia still rural with character and formed settlement according to ethnical subdividing, such as isn't it by Thomas Karsten:

Even the towns still had a definitely rural and tropical character, and were little more than overgrown villages. . . . , true urban activities played rather a small role. As regards housing, the Europeans lived in large, spacious ‘old Indies’ houses with enormous yards . . . . The *kampongs* were extensive, but the building in them were primitive and scattered, hence a certain amount of crops were still usually grown in the compounds. The Chinese were required to live in the ‘Chinese camp’ . . . , was the only section of the town fully built up.<sup>6</sup>

After year 1890, townee spring up quickly as economic activity effect springing up quickly started woke up by him and formed by him companies of commerce, industry and banking. Borrowing theory of human ecology of Robert E. Park (Chicago School) concerning room competition hence hereinafter happened invasion process, room domination and suksesi or farm by immigrant of Europe nation to kampongs take its rise, so that resident of kampong have to make a move to other countrified which it is of course will add density him, like elaborated by Thomas Karsten:

The rapid expansion of the towns naturally led the Europeans to buy more and more land, preferably along the existing highways. This was to a large extent not farm and pasture land, as was the case in the Netherlands, but land where there already were *kampongs*, so that the Native population driven from there had to resort to an ever-increasing concentration of housing on the remaining *kampong* lands. The Chinese population remained in the ‘Chinese camp’, . . . .<sup>7</sup>

#### Character Physical and Social of Real Estate

Improvement of amount residents of urban, especially metropolis like Jakarta and of Surabaya, have caused the growing of requirement will various town medium and infrastructure of including housing. Make-Up of requirement of housing in this urban cause town continue to expand, initially in town area which must countrified area menggusur and productive farm like rice field and fishpond. For example, in the year 1993 wide of rice field in town of Surabaya is equal to 1.350 ha, but in range of time 5 year that is in the year 1998 wide of rice field dwindle to become 444,032 ha (Surabaya In Number, 1998). But hereinafter, progressively difficult of him free and decrease farm him which is cheap relative, hence development of housing shift to town boundary which still have farm price which is cheap relative.

Since around year 1980-an, government urge all development to develop; build big scale housing and expressly again written in Invitor Invite No. 4 year 1992 (Undang Undang No. 4 tahun 1992) concerning Housing and settlement that is concept of Kasiba (Kawasan Siap Bangun) and of Lisiba (Lingkungan Siap Bangun). This Policy which supported by policy of very easy banking give investment credit [in] housing area have raced all developers for berlomba-lomba to develop big scale

housing in around metropolitan town like Botabek and of Gerbangkertasi (Gresik, Bangkalan, Mojokerto, and Sidoarjo) by various the promotion of as self-supporting new town.

This big scale Housings for example Bumi Serpong Damai (6.000 ha), Kota Tigaraksa (3.000 ha), Citra Raya Tangerang (2.000 ha), Kota Legenda (2.000 ha), Royal Sentul (2.000 ha), Lippo Cikarang (2.000 ha), Bintaro Jaya (1.700 ha), Gading Serpong (1.000 ha), Kota Jaya 1.000 ha), Pantai Kapuk Indah (800 ha), dan Lippo Karawaci (700 ha). In town of Surabaya, like Pantai Timur Surabaya (3.200 ha), Citra Raya (1.000 ha) and Pakuwon Indah (4.00 ha).

As expected by self-supporting town of this new towns can give work field to all his dwellers, but in reality most dwellers of housing of scale of nesar this still base on his mains town. For example, according to research in new town of Depok only 36,9% from amount all absorbent workerses, the rest equal to 63,1% working in this Jakarta.8 Fact generate new problems for town off[is core of like Jakarta<sup>8</sup>, for example first, excelsior of traffic jam especially at the rushhour. On Duty Transport Traffic Road; Street (Dinas Lalu Lintas Angkutan Jalan) note, in Jakarta there are 71 location becoming the jam gristle dot and jam ringleader of is vehicle of person is 97,5% from totalizing existing vehicle (year 1999, 372,044 vehicle unit).

Both, density of traffic progressively mount and even happened traffic jam at come home activity at taking the air especial and turnpike go to suburban housings. For example, turnpike burden height of Jakarta-Cikampek earn seen from view of queue in tollgate mouth especially at evening and morning. similar view also seen at turnpike of Jakarta-Tangerang-Merak. In the year 1993, amount journeys of citizen of Jabotabek is a number of 27,9 million per days, and in the year this 2010 number will mount to become 50 million journey of in one day<sup>9</sup>

This matter can understand by because service of publik transport which still ugly force society to progressively depend on vehicle of person. For example, all workers who live in area of Botabek (Bogor-Jakarta-Bekasi) prefer to choose vehicle of person because very vital transportation for them. A worker who live in Tangerang and work in more opting Jakarta buy second car paid by installments Rp. 360.000,- per month than have to exploit publik transport which must finish the expense of a number of. Rp. 240.000,- per month (Kompas, 18 May 2001).

From evaluation of New Urbanism, housings in metropolises boundary like Jakarta and of Surabaya is it true planned by have orientation to at personal transportation. By have orientation to at vehicle of person, hence there are some effects

1. pedestrian do not be required again or intentionally not to be provided, ad for at collector road; street and local for efficiency of[is expense of. Freshment and uncared

pedestrian security. Even so pavement provided [do] not be connected to place of transit vehicle of public utilities or public.

2. Infrastructure walk in housing area planned wide relative, ad for simple housing (RS/RSS) where local street planned just for pedestrian which in the end was also passed by vehicle of motor, specially motorbike because range distance which far from place of transit vehicle of public

In development of housing in the reality private sector [party/ side] is perpetrator of most dominant development, for several Pelita and according to Environment Indonesia year statistics 1999, during Pelita VI ( 1994-1999) totalizing the amount of houses which have been woke up is equal to 601.697 house unit. Of amount of private sector party (REI) develop counted 62,36%, the rest woke up by Perumnas ( 27,73%) and Co-Operation ( 9,91%). This matter indicate that have happened regional displacement of activity or influence of domain levying of house, what initially is pribadi-komunal domain become public domain (Silas, 2000).

With strong role of private sector party and full of support of government (licensing and gift of KPR construction), hence levying of house become depend on played government through cooperation with government. House become sold commodity is belikan as one of the invesment choice to look for the profit of him, so that mean house have bergesar of understanding of *omah* (holding responsible isn't it family) becoming understanding of economics (like price, request, market, value).

As a result from change of this domain is

1. appearance and arrange house order do not be reasserted at organizer (family member and dweller) and local climate condition but at appearance desired by and market of pemodal (Silas, 2000). So that do not surprise if house appearance in area of real estate with langgam the foreignness for Indonesia society. For example, some housings in Jabotabek with Mediterranean style (Perumahan Bukit Gading), architecture style of whole world (Kota Bunga Puncak: Villa Japan, Cowboy, Thailand, Dutch, Swiss, Nottingham, Manchester), Georgian Style (Villa Gading Indah), in Surabaya like style of Paris ( Villa Bukit Mas).
2. Composition usage of farm exploited as maximum for effective farm that is housing farm (bigger than 60%) and medium commerce of which can sold. For example, from 13 housing which in Surabaya, 46% from existing housing is farm benefit for housing more than 60%. As a result is farms for the sake of public like provided other public facility and garden as small as possible. Gardens isn't it as farm which "remain" which do not planned to do by effective of house plot of lands. Even so there is green farm, especial consideration is remain to pertimbangan of business, for

example green farm able to yield fund and improve value sell housing that is like golf course. For example the hoisterous of housing of golf in area of Bogor and case planning of housing of golf in area of Surabaya West.

3. Multifarious House type of manner have been applied at big scale housing according to rule of government concerning composition 1:3:6 (Decree With Three Minister), but because consideration of market hence simple houses isn't it at one particular selected housing block luxuriant house and middle house so that value sell superordinate at luxuriant housing remain to reach. With dissociation of this housing blocks, hence social interaction between various social stratification do not reach, such as isn't it by concept of TND. area of Surabaya West.

Marking of Real estate other which at variance with concept of TND is

1. Density relative lower to range from 50 - 200 head per ha, ad for simple housing [of] density range from 300-400 head every hectare (tables 1), causing at farm consumption which relative wide of and range distance which relative far for pedestrian if/when compared to concept of compact at TND.
2. Concept of multi function at big scale housing can be applied by because wide of available farm answer the demand of, but this matter do not happened at the wide of simple housing [of] farm of small relative and energy support the resident of a few/little, for example below/under 20 smallest rule hadimana in the plan town that is society unit is wide of maximum 20 ha with energy support resident 3.500 head. Although available housing medium [at] this big scale housings, motor vehicle traffic frequency of masih relatif high, ad for because the range distance of relative far, both because do not be made available by medium him of pedestrian the balmyness (teduh) and in direct corollation to gone to publik utilities.

**Table 1**



## Density and Composition Usage of Farm of Real estate

No	Year Development	Name Housing	Location	Wide (ha)	Density (man/ha)	Utilize Farm*		
						Wisma (%)	Suka (%)	Marga (%)
1.	1970	Tenggilis Mejoyo	Tenggilis	32	75	76	6	18
2.	1974	Manyar Tempotika	Manyar	50	93	56	24	20
3.	1980	Chris Kencana	M. Sungkono	10	175	55	7	38
4.	1982	Dharma Husada	Dharmahusada	12	96	77	3	20
5.	1983	Margorejo Indah	Margorejo	40	94	58	7	35
6.	1983	Villa Kalijudan Indah	Kalijudan	28	97	61	6	33
7.	1989	Delta Permai I	Panjang Jiwo	15	122	57	13	30
8.	1990	Graha Permai I	Mulyosari	8,5	352	67	8	25
9.	1992	Prapen Indah	Prapen	7,8	130	61	11	28
10.	1994	Graha Prima II	Mulyosari	7,5	456	72	2	26
11.	1995	Dian Istana	Menganti	60	58	57	8	35
12.	1995	Pantai Mentari	Kenjeran	50	50	59	2	39
13.	1999	Darmi Hill	Sungkono	22	80	60	12	28

**in Surabaya**

Source: result of analysis, year 2000 \* calculation rounded up the to the above of.

## Values of New Urbanism at Kampong.

Most metropolis areas in Indonesia like Jakarta and of Surabaya consist of countrifiedly. Like town of Jakarta, 85% region of consisting of kampung-kampung. As an subsystem of town, according to Nimpoeno

kampung have social character as follows:

1. Consist of resident able to teridentifikasi clearly, because owning to feel awareness and togetherness as citizen an unity
2. Developing and owning an regularity of and social of spatial, grown of itself kumunitas, beside by rule of town
3. Usage of building or farm which is function multi, is not dwelling function eye, but also there are like booth, workshop, salon, and telephone-shop
4. Adapting to broader environment that is passing transfer of resource
5. Creating and looking after various organization structure and also basin, what finally fulfill requirement of society makrosistem and of mikrosistem family.

Ad for environmental quality and quality of life which is ugly relatih, by fisik kampong have character as follows

1. High density that is more than 250 head per ha (rule of program of KIP). For example, kampong of Kapasari Pedekuhan in Surabaya for the width of 6,8 ha populate around 6.020 head or 885 head every hectare
2. Wide [of] house which is small relative, for example in the year 1990 wide of house every capita in countrified of town of Surabaya is equal to 15,27 m<sup>2</sup> (Silas, 1996). House generally choose next terrace
3. Function Multi penggunaan of farm, besides dwelling there are also house functioned for the business activity of (productive house). For example, at kampong of Kapasari Pedekuhan counted 44,44% from responder conduct activity of UBR ( Effort Base on Household)
4. Street facility which relative narrow between 2-4 metre with pattern walke chessboard (gridiron). For dweller of kampong, prasarana walke this exploited as accessing to place of transit vehicle of public ( bus, bemo) with bicycle or motorbike, but very that street facility which have improve;repaired ( result of program of KIP) becoming alternative road;street for town transportation systems (especially car) when jam happened or become short cut.

## CONCLUSION

Pursuant to evaluation of New Urbanism, hence earning isn't it that Real estate is not an friendly settlement of environment more than anything else have continuation. Even Real Estate become one of the cause for environmental problems of existing town, like air pollution which because of planning which orienting at motor vehicle, low density and also the lack of green farm, decreasing of it productive and green farms (agriculture), including the him of countrified of town, because requirement of farm which relative wide of in consequence of planning concept with at which relative lower, relative farm broadness for the street facility (orient vehicle of motor).

Dream an housing community which jell to have interaction among various tired by nor social strata because of less available by of public rooms him (garden, building) for activity to with difficult quit of relative him change of social organization for the mengukuti of change of organization of spatial, existing is rooms for the activity of family and individual, for example Klub Family, and Mal.

On the contrary, kampong in urban have niali-nilai which isn't it by movement of New Urbanism, like density which is high relative, street facility which relative narrow, function multi where house was also exploited for the business activity of and of multi house type dwelt by various social strata, ad for owning social tying jelling.

#### An Discovery.

With kampong have character and physical of new urbanism can conception this kampong is applied and accepted or brought into contact at development of area of real estate in future. Manifestly in social and field it is true difficult to be accepted. Manifestly in field, it is of course all developers will plan estat real matching with middle and middle faction market will; desire to the which is very base on mobilization with motor vehicle.. socially, room structure or organization of spatial if accepted can easy to be achieved , but very is difficult to accepted by because social structure of middle society is to the above of very difficult to follow change of planned spatial. For that, conception easier possible kampong brought into contact at simple housing area which have social structure looking like with social condition of kampong.

#### BIBLIOGRAPHY

- Bernstein, Janis. *The Urban Challenge in National Environmental Strategies*. The World Bank, Environmental Management Series paper No. 02, April 1995.
- Branch, Mark Alden. "No Neotrad in My Backyard, Dallas Suburb Says," *Planning*, January 1996, hal. 20.
- Curry, Milton S. F. "The Magic Kindom Revisited: New Urbanism and the Imaginary," dalam *The Color of Urbanism*. Newsletter, College of Architecture, Art, and Planning, Cornell University, Fall 1999, hal. 8-10.
- Delsohn, Gary. "Peter's Pockets," *Planning*, February 1994, hal. 18-21.
- Era Baru Bisnis Realestat*. Dewan Pengkajian Masalah Perumahan dan Permukiman Real Estate Indonesia 1992-1995.
- Oliver, Gordon. "1000 Friends are Watching," *Planning*, November 1992, hal. 9-13.
- Knack, Ruth E. "Repent Ye Sinners, Repent," *Planning*, August 1989, hal. 4-13.
- "In the Works ... South Brentwood Village," *Planning*, March 1991, hal. 46.
- "New Urbanism Thrives In Pacific Northwest," *Professional Builder*, August 1999, hal. 42-43
- Nimpoeno, John. "Kampung Kota: Suatu Substistem Perkotaan." Makalah Seminar Kampung: Realitas Habitat Kota, FTUI Jurusan Arsitektur, 12 Desember 1988.
- "Planners Library: Growth without sprawl; New Urbanism in perspevtive" *Planning*, November 1983, hal. 36-38.
- Perumahan Rakyat Untuk Kesejahteraan dan Pemerataan*. Jakarta: Menteri Negara Perumahan Rakyat Republik Indonesia, 1997.
- Rudlin, David dan Nicholas Falk. *Building the 21<sup>st</sup> Century Home: the Sustainable Urban Neighbourhood*. Oxford: Architectural Press, 1999.
- Silas, Johan, Andon S. W. dan W. Setiawan (penyunting). *Rumah Produktif: Dalam Dimensi Tradisional dan Pemberdayaan*. Surabaya: Jurusan Arsitektur, Institut Teknologi Sepuluh Nopember, 2000.
- Siahaan, Hotman M. dan Tjahjo Purnomo W (penyunting). *Kampung Surabaya: Menuju Metropolitan* (Johan Silas). Surabaya: Yayasan Keluarga Bhakti Surabaya, 1996.
- Tu, Charles C. dan Mark J. Eppli. "Valuing New Urbanism: The Case of Kentlands," *Real Estate Economics*, 1999, vol. 27, hal. 425-451.
- Wertheim, W.F. *The Indonesian Town: Studies in Urban Sociology*. The Hague: W. van Hoeve Ltd, 1958.

#### Endnote:

- <sup>1</sup> "New Urbanism Thrives In Pacific Northwest," *Professional Builder*, August 1999, hal. 42-43.
- <sup>2</sup> Gordon Oliver, "1000 Friends are Watching," *Planning*, November 1992, hal. 12.
- <sup>3</sup> Charles C. Tu dan Mark J. Eppli, "Valuing New Urbanism: The Case of Kentlands," *Real Estate Economics*, 1999, vol. 27, hal. 425.
- <sup>4</sup> Ruth E. Knack, "Repent Ye Sinners, Repent," *Planning*, August 1989, hal.10.
- <sup>5</sup> Mark Alden Branch, "No Neotrad in My Backyard, Dallas Suburb Says," *Planning*, January 1996, hal. 20.
- <sup>6</sup> W.F. Wertheim (ed.). *The Indonesian Town*, 1958, hal. vi.
- <sup>7</sup> -----, Op. cit., hal. vii.
- <sup>8</sup> Soegijoko, Budhy Tjahjati S.,, "Arah Perkembangan Kota-Kota Baru dalam Perspektif Kebijaksanaan Tata Ruang Nasional," dalam *Perumahan Rakyat Untuk Kesejahteraan dan Pemerataan*. Jakarta: Menteri Negara Perumahan Rakyat Republik Indonesia, hal. 11.
- <sup>9</sup> *Era Baru Bisnis Real estate*. Dewan Pengkajian Masalah Perumahan dan Permukiman Real Estate Indonesia 1992-1995, hal. 49.

# PROCEEDINGS

3<sup>rd</sup> ICETD 2014



Hosted By :  
Faculty of Engineering and Faculty of Computer Science  
Bandar Lampung University, Indonesia