1st GCC International Conference on
Industrial Engineering and Operations Management
Nov. 26-28, 2019, Riyadh, Saudi Arabia
Venue: Prince Sultan University (PSU) Campus

Preliminary Program

IEOM Riyadh Conference

November 26-28, 2019

Host University

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Conference Program

November 25, 2019 (Monday)

13:00 – 20:00 Registration

November 26, 2019 (Tuesday)

Tuesday, November 26, 2019

8:00 REGISTRATION

9:00 Welcome Address: **Dr. Ahmed S. Yamani**, Rector, Prince Sultan University, Riyadh, Saudi Arabia

9:30 Opening Keynote I: **H.E. Eng. Osama Al Zamil**, Deputy Minister at Ministry of Industry and Mineral Resources

10:15 Opening Keynote II: **Dr. Andreas Schwer** (Saudi Arabian Military Industries-SAMI CEO)

11:00 Networking/Coffee Break

11:15 Keynote: **Dr. Sami Alnuaim**, The President of the Society of Petroleum Engineers International

12:15 Networking Buffet Lunch/ Dhuhr Prayer

1:30 Parallel Sessions & **PANEL SESSION: Tracks: Industrial & Manufacturing**

3:00 Networking/Coffee Break/Asr Prayer

3:30 Parallel Sessions & **PANEL SESSION: Tracks: Transport and Logistics**

5:00 Break

IEOM Gulf Student Simulation Competition

Lab G-A11: Tuesday from 3 PM to 11 PM and Wednesday from 3 PM to 6 PM

Winners Annoucement at the Awards Dinner

November 27, 2019 (Wednesday)

8:30 Parallel Sessions

10:00 Networking/Coffee Break

10:15 Keynote: **H.E. Dr. Esam Alwagait** - Director of National Information Center (NIC)

11:00 Keynote: **Eng. Suliman Almazroua**, CEO at National Industrial Development & Logistics Program

11:45 Networking Buffet Lunch/ Dhuhr Prayer

1:00 Parallel Sessions and **PANEL SESSION: Entrepreneurship and Innovation**

2:30 Networking/Coffee Break/Asr Prayer

3:00 Parallel Sessions

4:30 – 6:00 pm: Poster Session

7:00 – 10:00 pm, Conference Awards and Recognition Dinner - Outdoor

November 28, 2019 (Thursday)

8:30 Parallel Sessions

10:00 Networking/Coffee Break

10:15 Keynote: **Dr. Surendra M. Gupta**, Professor of Mechanical and Industrial Engineering, Director of Laboratory for Responsible Manufacturing (LRM), Northeastern University, Boston, Massachusetts, USA

11:00 Keynote: **Dr. Mohammed Al-Majed**, Senior Advisor to the Minister, Ministry of Industry and Mining, Saudi Arabia

11:45 Networking Buffet Lunch/ Dhuhr Prayer

1:00 Parallel Sessions and **PANEL SESSION: Track: Environmental & Sustainability**

2:30 Networking/Coffee Break/Asr Prayer

3:00 parallel Sessions

4:30 Closing Remarks

LEAN SIX SIGMA COMPETITION
ID 154 A Case of Eliminating Wastes using 5S for a Household Electrical Appliance Warehouse
Ghalia W. Zagzoog, Mawadda M. Samkari, and Abdulaziz T. Almaktoom, Department of Operations and Information Management, Effat University PO Box 34689, Jeddah 21478, Kingdom of Saudi Arabia

LOGISTICS AND SUPPLY CHAIN COMPETITION
ID 077 Criminal Supply for the Generated Organ Demand
Zeeahan Asim, Sir Syed University of Engineering and Technology, Karachi, Pakistan
Shahryar Sorooshian, University of Gothenburg, Gothenburg, Sweden

MASTERS THESIS COMPETITION
ID 157 Design and Implementation of Deadlock Control in Manufacturing Systems
Husam Abdu Ghaleb Kaid, Industrial Engineering Department, College of Engineering, King Saud University, Riyadh, Saudi Arabia

ID 131 Supply Chain Network Redesign, Case Study in Lubrication Industry
Khalid Al-Khodhairi and Ahmad Al Hanbali, Systems Engineering Department, King Fahd University of Petroleum and Minerals (KFUPM) Dhahran, Saudi Arabia

November 27, 2019 (Wednesday)

Session: 8:30 – 10:30 am

8:30 – 10:00, WEDNESDAY Industry 4.0 / Industry Solutions Room 1 (Auditorium 1)

Session Chair:

8:30 – 9:00 (Wednesday)

Mr. Md. Abdullah Al Mahmud
Founder & CEO, Thriving Skills Limited Assistant Professor of MIS
Manarat International University
Dhaka, Bangladesh

Skills Focused Self-education for Industry 4.0

Mr. Md. Abdullah Al Mahmud is Assistant Professor of MIS at the Manarat International University, Dhaka. He served as Coordinator of MBA

9:00 – 9:30 (Wednesday)

Ali Akbar
Industrial Iot Expert
Siemens Malaysia Appointed Trainer for IIOT
IOT SATA PVT. LTD.
Subang Bestari, Shah Alam
Selangor, Malaysia

9:30 – 10:00 (Wednesday)

1:00 – 1:30 (Wednesday)

Mohammed Khursheed Akhtar, Ph.D.
Data Scientist at KAU-Web Observatory for Web Studies
King Abdulaziz University (KAU)
Jeddah, Saudi Arabia

8:30 – 10:00, WEDNESDAY Global Engineering Education Room 2 (Auditorium 2)

Session Chair:

8:30 – 8:50 (Wednesday)

Dr. Wahyudi Sutopo
Associate Professor
Department of Industrial Engineering
Faculty of Engineering
University of Sebelas Maret
Surakarta, Indonesia

Learning a Supply Chain Management Course by Problem Based Learning: Case Studies in the Newspaper Industry

Sebastiana del Monserrate Ruíz – Cedeño
Unidad de Cooperación Universitaria
Universidad Técnica de Manabí
Portoviejo, Ecuador

ID 207 Identifying the Logistic Collaboration in SCM: A Study of Indian Automobile Manufacturing Companies
Asad Ullah, Department of Management studies, Middle East College, Muscat, Oman

ID 311 System Dynamics Modeling for Mitigation Strategies of the Energy Use and Greenhouse Gas Emissions in Lebanon's Road Transport Sector
Marc Haddad, Charbel Mansour and Jad Diab
Department of Industrial and Mechanical Engineering
Lebanese American University
Byblos Lebanon

ID 111 The Recycling of Fire Extinguisher; First Step Toward a Circular Economy
Ana Julia Acevedo Urquiaga
European-Latin American Center for Logistics and Ecological Projects (CELALE)
Bogotá, Colombia

José Antonio Acevedo Suarez
Logistic and Production Management Laboratory (LOGESPRO)
Havana Technical University "José Antonio Echevarría" (CUJAE)
Havana, Cuba

Neyfe Sablón Cossío
Postgraduate Institute
Technical University of Manabí
Portoviejo, Ecuador

Stefan Köhler
Institute of Agricultural and Urban Ecological Projects (IASP)
Humboldt University of Berlin
Berlin, Germany

Yakcleem Montero
Career Industrial Engineering
Universidad Técnica del Norte
Ibarra, Ecuador

1:00 – 2:30, WEDNESDAY Doctoral Dissertation Competition Room 7 (Faculty Lounge)

Session Chair:

ID 084 A review on the current status of facility management practices in building industry and prospective BIM intervention to manage the facilities effectively during its service life
Abdulaziz Aldowayan, University Of Sharjah Dammam Saudi Arabia

ID 162 Application of Modified NSGA II (M-NSGA II) Algorithm to large Scale problems
Mohamed H. Gadallah and Abdel Rahman Ali M. Ahmed, Mechanical Design & Production Department, Faculty of Engineering, Cairo University

ID 053 Breach of Psychological Contracts and Discretionary Behaviours among Academic Staff in Nigerian Universities
Mustapha Olanrewaju Aliyu, Department of Industrial Relations and Personnel Management, Faculty of Management Sciences, University of Ilorin, Nigeria

2:30 – 3:00 pm – Networking Break

Session – Wednesday (November 27): 3:00 – 4:30 pm

1:00 – 4:30, WEDNESDAY Industry 4.0 / Industry Solutions Room 1

Session Chair:

3:00 – 3:30 (Wednesday)

Olayan Alharbi, PhD
Lead Data Science at Obeikan Digital Solution
Assistant Professor
Majmaah University

Industrial and Systems Engineer Alejandro Souza Sánchez (ITESM)
Industrial and Systems Engineer Sergio Alejandro Morado Frausto (ITESM)
Industrial and Systems Engineer Jose Adrian R. Bours Gandara (ITESM)
Industrial and Systems Engineer Yael Prieto González (ITESM)
monterrey Mexico

ID 016 Real Time Car Engine Condition Monitoring By Using Instantaneous Angular Speed Analysis (IAS)
Abdullrhman Sait and Jamal Alfifi
Mechanical Engineering Technology Department
Yanbu Industrial College
Yanbu, Kingdom of Saudi Arabia

ID 290 Reduction in Rejection Rate of Polypropylene Bags via Six Sigma
Muhammad Hamad Sajjad
Industrial Engineering Department, College of Engineering, Alfaisal University
Riyadh, Saudi Arabia

ID 266 Removal of Mercury in Water using Sargasso Sea
Ana Priscila León Guadiana, María Fernanda Manllo Saide, Daniela Leal Arrambide, Rene Lozano Acosta, María de la Luz Giovana Díaz Alemán, Daniela Alejandra Díaz González, Luis Andrés Martínez Dávalos
Instituto Tecnológico y de Estudios Superiores de Monterrey
Monterrey, Nuevo León, Mexico

ID 262 Sargassum-based filter as a water decontaminant of heavy metals in Mexico
Christofer James Cárdenas Millán, Tecnológico de Monterrey, MONTERREY, Mexico

ID 015 Smart Stick for Blind Persons
Hammad Ur Rehman, Bahria University, Karachi, Pakistan

ID 232 Study on The Use of Alternative Concrete Mix Materials on Hollow Precast Foundations
Nawir Rasidi1, Sri Wiwoho Mudjanarko2,* , Dadang Supriyanto3, Firdaus Pratama Wiwoho4, Mohd Haziman Wan Ibrahim5, Abdul Talib Bin Bon6
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Universiti Tun Hussein Onn Malaysia (UTHM)
Johor, Malaysia

ID 328 The Bioregional Principal at Banyuwangi Region Development in the Context of Behavior Maintenance
Ratna Darmiwati
Catholic University of Darma Cendika, Surabaya, Indonesia

ID 006 The Design of Halal Logistics System on Bulk-Type Organic Fertilizer
Qurtubi
Department of Industrial Engineering
Universitas Islam Indonesia
Yogyakarta, Indonesia

ID 267 The Influence of Loyalty, Education &Training and Performance on Job Promotions
Muhamad Djufri
Akademi Keuangan dan Bisnis Indonesia Internasional (AKBII), Bandung, Indonesia

Abdul Malek Bin A. Tambi
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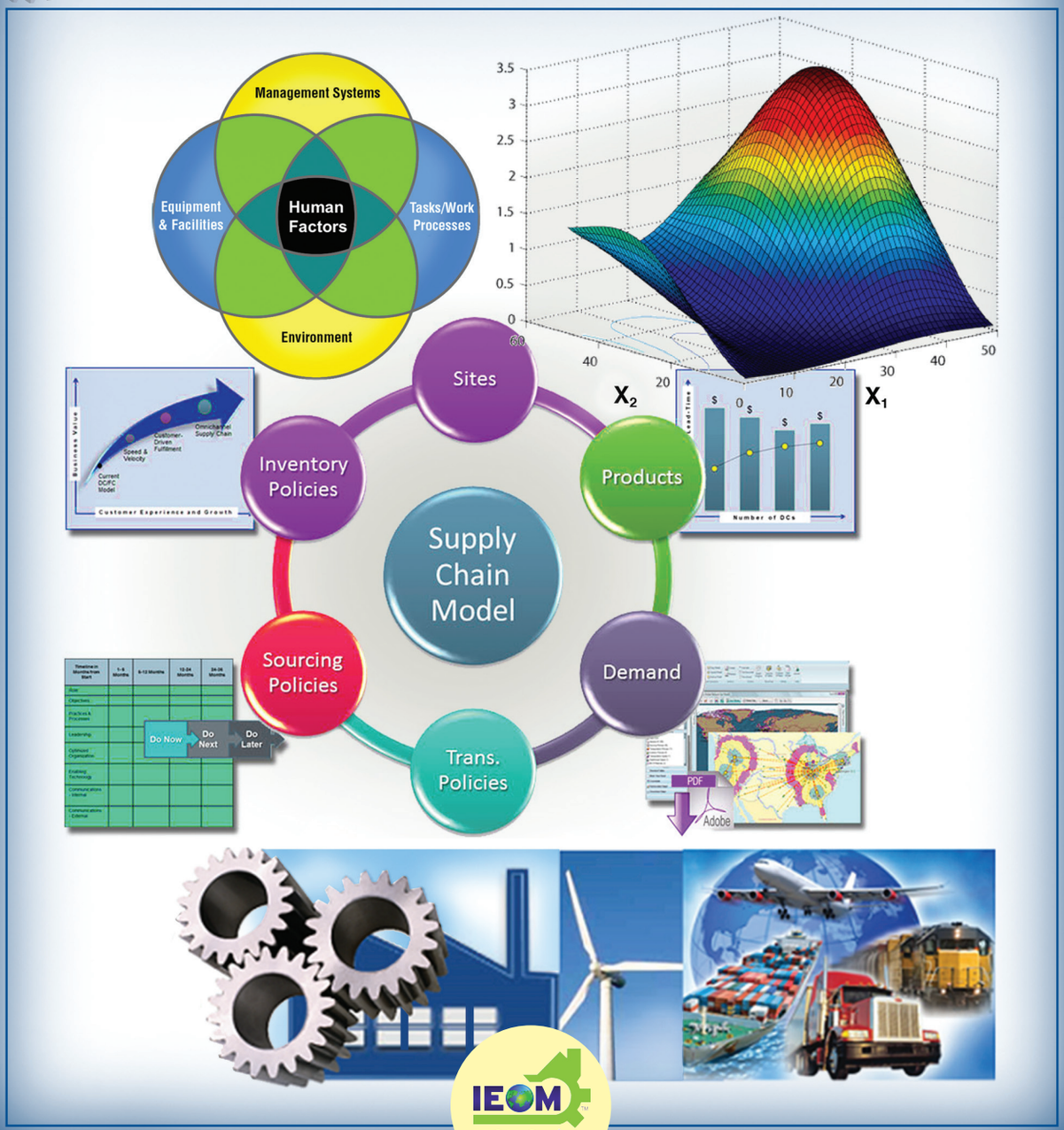

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www.ieomsociety.org/brazil2020/

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Venue: The Faculty of Civil and Industrial Engineering of Sapienza – University of Rome, Italy

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THE BIOREGIONAL PRINCIPAL AT BANYUWANGI REGION DEVELOPMENT IN THE CONTEXT OF BEHAVIOR MAINTENANCE

Ratna Darmiwati
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Abstract. The tourism, natural resources, local culture and Industries with the environment are the backbone of the government's foreign development in the region exchange. The sustainable development without the environment damaging that all activities are recommended, so that between the nature and humans can be worked simultaneously. The purpose of study is maintaining the natural conditions as they are and not to be undermined by irresponsible actions. All of them are facilitated by the government, while maintaining the Osing culture community and expanding the region and make it more widely known. The maintenance of the natural existing resources should be as good as possible, so that it can be passed on future generations in well condition. All of the resources, can be redeveloped in future.
The research method used qualitative-descriptive-explorative method which are sorting the datas object. The activities should have involved and relevant with the stakeholders such as the local government, the community leaders or non-governmental organizations and the broader community.
The reciprocal relationships between human beings as residents and the environment are occurred as their daily life. Their life will become peaceful when the nature is domesticated. The nature will not be tampered, but arranged in form of human beings that can be moved safely and comfortably.

Keywords : The Culture, Industry, Natural Resources, Tourism.

1. The Introduction

The total area of Banyuwangi regency is about 5.782,50 km^2. The condition shows that the area has much natural resources and uniqueness. There are two sides of Banyuwangi. One side is a highland (mountainous area) and the other side has a long coastline of 175,8 km, which has 10 islands (source : Big Data Analytics, BDA, 2012). The existence of a geographical potential spearheads economic growth in Banyuwangi Regency. The economic of Banyuwangi growth on 2010 to 2012 continues to increase from 6,22% to 7,27%. Which means exceeds the national growth of 6,23% (source: The statistics of data, BPS, 2014).

This favorable condition needs to be developed more systematically, so that many sectors are developing and eventually followed by the surrounding area.
Banyuwangi has a lot of worthy potential to be utilized for the improvement of people's welfare. This is supported by the existence of population with productive age, which is 67,88% from 1.588.082 peoples (source : The statistics of data, BPS, 2014) as supporter of potential development in Banyuwangi).
Banyuwangi regency also has promising the tourism when the potential of Banyuwangi is well managed with the unique cultural treasures of community. Those are blended by three ethnic groups, including the Maduranese, Balinese and Javanese. The Maduranese came as fishermen originally and lived in coastal areas of Banyuwangi. The Balinese tribe was mingled by trade relations between the Mojopahit's kingdom in Java and the Bali's kingdoms (such as : the Klungkung and Karangasem kingdoms). Those three cultures was acculturated and gave to the Osing birth community with a unique culture which is still exist until now. The language that used to communicate has a blend of the those three cultures.
The Osing people are settled in several districts in the central and northern regions of Banyuwangi Regency especially in Banyuwangi district, Rogojampi district, Sempu district, Glagah district, Singojuruh district, Giri district, Kalipuro district and Songgon district. The Osing community or also commonly known as "Wong Osing" are considered as the natives of Banyuwangi Regency, including an area at the eastern most tip of the Java island that is also known as Blambangan Peninsula.

1.1 Religion

During the early formation of the Osing community, the main religion of the Osing people is Hinduism-Buddhism (during the Majapahit kingdom). However, the development of Islamic kingdoms along the north coastal region have caused a faster spread of Islam among the Osing people. The development of Islam and the other foreign influences the Osing community. The Osings are mostly adherents of "Islam Abangan or not pure of Islam", although there are some who still follow Hinduism religion. The elements of animism could be seen in their religion too. The Osings share a similar culture and spirit with the Balinese and the Hindus, which celebrate ceremonies such as Nyepi. Just like the Balinese people, the Osing people also share the Puputan tradition. In Banyuwangi, It is a common phenomenon to see between mosques and puras (Hindu temples) are built nearby. About 3.000 - 2.000 BC, the Hindu and Moslem had been existed as their religion (source : Banyuwangi city-wikipedia).

1.2 History

The history of the Osings started at the end of 15th century. When the Majapahit was falling, there was a resistation of the Islam religion conversion. It caused many peoples fled to east Banyuwangi, Bali and Lombok. Some of the Javanese were converted to Islam by the Muslim's Makasar in the 16th century. The remaining of Majapahit Princes established with the Blambangan Kingdom, which stretched from the Blambangan Peninsula right up to the Tengger mountains of Central Java. The Blambangan held sway for more than two hundred years before they surrendered to the second Mataram Sultanate on 1.743 BC and then became Islamization of the Osing people eventually. Even though, it did not convert to Islam officially until the 19th century, then small communities of Muslims do pre-exist on this date. It is caused by the Osing's conversion during at 19th century, when Banyuwangi was still unscathed by the Dutch colony. In spite of the Dutch colony attempted to propagate Islam and Christianity religion among the Osings, there was many peoples, who stucked to their old beliefs (source : Banyuwangi city-wikipedia).

1.3 Culture

Until now, a large Hindu population still exists among the Osings. The Osing people differs from the Balinese people in terms of social stratification. The Hindus Osing people does not practice caste system like the Balinese people. This is happened because of the Islamic influences the Osing people. That is practiced by a significant number of Muslims in their community.

1.4 Art

The various of Osing people's art forms are unique and contains mystical elements just like as their Balinese and Tenggerese relatives. The main art forms of their popular version are Gandrung traditional dance, Patrol, Seblang, Angklung, Barong dance, Kuntulan, Kendang Kempul, Janger, Jaranan, Jaran Kincak, Angklung Caruk and Jedor. The other of art forms are still preserved, such as the nursery rhyme, especially among the children school such as the Jamuran and Ojo Rame-Rame. These short nursery poem rhymes are used generally to accompany during children's play. These nursery rhymes are done to teach positive values in early childhood. The nursery rhyme of Jamuran teaches about communal work, while Ojo Rame-Rame that teaches patriotism of people (source : Banyuwangi city-wikipedia).

Figure 1. The tourism map of Banyuwangi Regency

Banyuwangi Regency have six Unique Facts, stated that :
The Government of Banyuwangi Regency has received the "Indonesia Green Awards 2016", which is giving for its commitment as a policy developed in territory by promoting environmental preservation and maintenance. The award involves the Ministry of Forestry and Environment and Industry, where the point was given for high appreciation to Banyuwangi Regency. It also emphasizes the Government's commitment to environmental preservation and maintenance for Banyuwangi in facing the global warming. This commitment should be warned in purpose to save the world population. The seriousness of the regional government is manifested in a number of regulations such as the requirement for issuance of building permit. The building permit would be granted if its have green land, at least 30% of the total area of land owned. The other programs are shown such as programming of The Toilet Cleaning, The River Cleaning and The Land Greening for good oxygen supply to creature life. All of these programs are considered as sustainable development and they are able to invite the entire Banyuwangi community to participate (Source: Slamet Kariyono, The Secretary of Banyuwangi District, 2016).

The Tourism sector is ongoing as a part of the regional acquision development and expected to boost the populist economy in the region. All of them need to consolidate the local infrastructure which is strengthening the Osing culture as a strategy to prosper of the Banyuwangi people. This condition is expected to grow the cities surroundings such as Jember Regency, Bondowoso, Besuki and Situbondo in east Java immediate continuously.

The development of tourism in Banyuwangi Regency embraces the conception of ecotourism that has been realized, so that the Osing people land has been awarded of Eastern Regional Organization for Planning and Human Settlements (source : Between East Java, 2014). This concept establishes with the nature and culture are displayed as the condition in there that without fabricating or destroying the nature. The development of tourism sector has a positive impact to increase the capita of community income and covering 70% of the population. That is 14,97 million people in 2010 and to 25,5 million people in 2014 (source : The statistics of data, BPS, 2014).

The research purposes stated that :

- Maintaining the nature condition as it is and not destroyed by the human action. Furthermore, life of living creatures exist in each place and can still develop naturally.
- Developing economic of the region with inner power of the community themselves which is facilitated by the government that increasing the selling value of the natural resources owned without damaging the existing habitat. The business is still running according with the initial commitment that is based on bioregional philosophy where can be implemented consistently and responsibly.
- Maintaining the existing of Osing community culture can be developed out of the region and to make it more widely known. As an asset that has a local wisdom, its technicality still evolves with the progress of the times that needs to preserve. The principle is not to abandon the original and still respect the ancestral heritage.
- Maintenance of the natural resources must be as well as possible, so that it can be passed on to the next generation in good condition and undamaged by human actions and it can be continued to be developed in future. Agree with Talbot and Magnoli (2000), stated "coupled with the low efficiency that natural resources are converted into useful, sustainable products and life-supporting services, all meaningful indicators suggest that the resulting current patterns of human activity and the settlement are not sustainable".

2. The Research Methods

Conducting observation and assessment of natural wealth and culture of the community has been owned by the government of Banyuwangi Regency. The goal of research is knowing more definite amount of the natural wealth and culture, that is profitable to be developed in future as entryway of the regional foreign exchange without damaging the existing environment.

The possible way is taken by using the qualitative-descriptive-explorative method. The condition of field are observed and reviewed with various lucrative possibilities with emphasis in quality. The main existence of natural resources and their mutually reinforcing to each other support and there are developed in further without damaging the existing of environment.

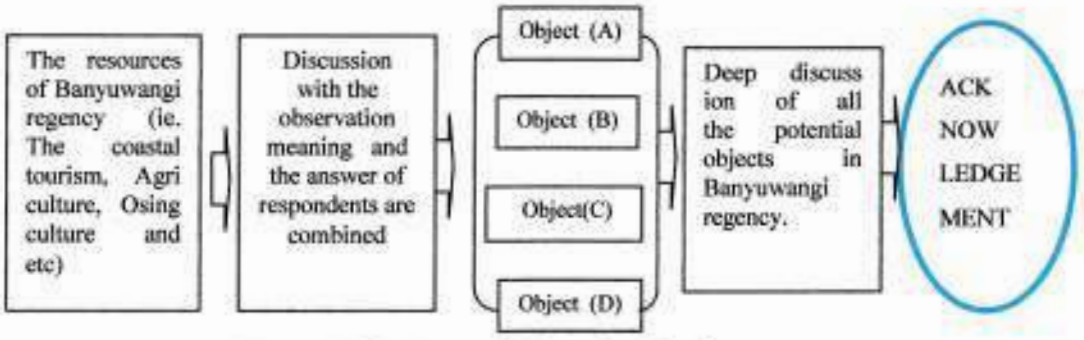

Figure 2. The Image of Research Flowchart

3. Result and Discussion of Banyuwangi Regency

Cooperation with all the companies are going to help Banyuwangi regency's government to utilize the tourism sector, the unique cultures, the potential of agricultural, the fishing and minerals. To build a good manufacture of factory where it should be environmentally. With the establishment of these factories, its absorb amount of the labor large enough, so that the welfare of the community increased positively. Rapoport (1990), said that the evaluation of environmental quality are the result of values, ideals, images, norms, expectation. There are two major meanings of environmental quality, that emphasizing social and psychological aspects.

The resources of Banyuwangi regency that can be developed, stated that :

a. Coastal tourism, Stalagtites and stalagmites, the fishery of people residents.
b. Agriculture of people (cane quality, rice quality, etc).
c. Osing culture which is a blend of three regions.
d. Eco-friendly factories (Bosowa Cement Factory, Glenmore Sugar Factory) that absorb 10,000 workers and 500 experts and lowers unemployment from 2% to 3,4% by 2015 (source : The Business's Tempo, 2015).

The local government has implemented environmentally development programs while consistently maintaining the ecosystem and resources available. This approach does actively to carry out by the clean government solely for achieving the community welfare of Banyuwangi regency. This potential optimization has been offset by the government that improving the quality of human resources through competitive education and empowerment community. The Program would be started with The Banyuwangi's Smart Program, The Banyuwangi's Learning Program, inauguration start from The Banyuwangi's Polytechnic to Banyuwangi's Airlangga University Branch. In order to prepare competent experts, this program is proven to increase the Human Development Index start from 2011 to 2014, which is increased from 68,89 to 71,44 (source : The statistics of data, BPS, 2014).

The resilience of the local government in determining to make independent economic in Banyuwangi can be achieved with full support of the community consistently and responsibly.

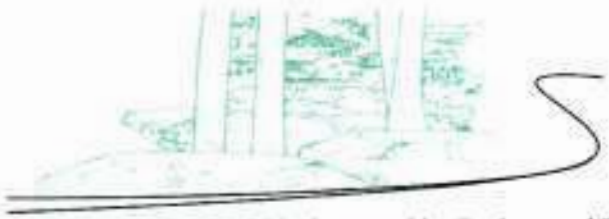

Figure 3. Function of Lung's City Could be increased by Ecology and Recreation Space

Since the human relationships with nature are so intimate, then humans will be asked permission to the plant before they cut it down and used as building materials. As we know, humans are civilized social emanation. Since they can adapt according on place and circumstances, so that between to each other friction can be avoided. The relationship between of the human activity and natural environment is not limited with residential areas only, but more varied and wider. Then all of them should be able to work together.

Rapoport (2000), said that environmental quality profiles not only provide in valuable information for analysis and design, but also make possible the transfer of findings for one scale to another. The suggestion that successful cities are distinguished from those, that will merely survive by their quality of life.

Figure 4. Traditional building can be adapted with weather and surroundings

Prevention of environmental damage is done by self-awareness which is better than compulsion. The knowledge of natural disaster-related prevention is resolved naturally, such as a dike along the waterfront using natural materials that can be blended with the sea water conditions themselves. It means that conquering with the nature.

The agreement with Rapoport's statement (2000) "Built environment as organization of space, time meaning and ccommunication; System of settings; Cultural landscape; Made up of fixed, semi fixed and non fixed future"

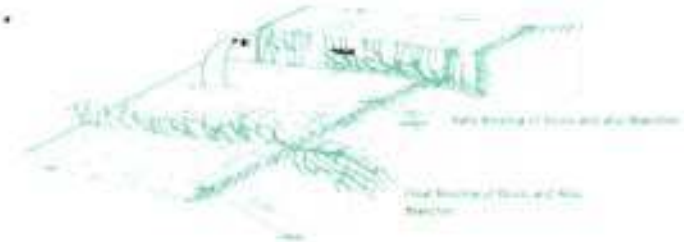

Figure 5. Prevention of landslidng by construction of shrub inserted

The utilization of shrub plants that have roots, stalks and transplant inserts are bound to each other. All of them work to prevent erosion on the hillside. Shrubs with roots will be caused an elaborated the skeletal construction to bind with the soil.

Figure 6. Planning of retaining wall by Burke, T (1996).

Figure 7. Function of the joint city's hugs that could be increased

The Banyuwangi natural conditions developed into the tourist objects. Then the local government has minimized destruction of the environment that may be resulting in loss of all the animal life existing. The solutions to complex problems that involve a wide range of scales of influence and time frames require the ability to appreciate and address linkages and interrelationship between a broad range of often conflict-capacity to cope with emerging complex problems depends on an increasing range and combination of complementary fields of technical knowledge. Indeed leading-edge firms are "..... becoming increasingly with multi technology, incorporating a growing number on fields of knowledge into their problem-solving armory (Pavitt, 1998)".

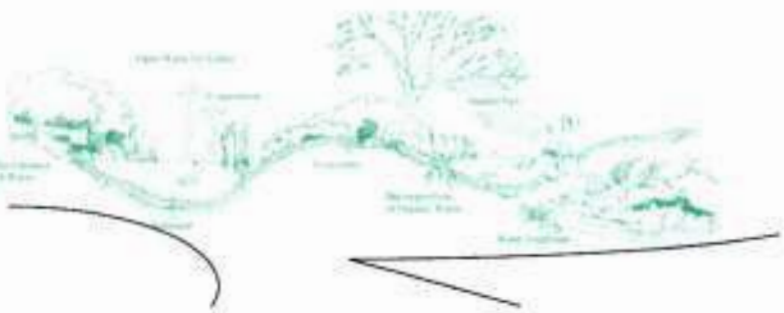

Figure 8. The Preparation of Waste-Water and Cresspool with Pond and Swamp Construction

3.1 The widest district in Java :

a. The area of Banyuwangi Regency is 5,782.50 km^2.
b. It has high land geography and low land stretches in Banyuwangi Regency.
c. North and South regions → there are dense and haunted forests.
d. West and East regions → there are mountains and sea areas.
e. Banyuwangi Regency can be reached by air, land and sea.
f. Banyuwangi Regency borders with three regencies (Bondowoso, Situbondo and Jember), which could be supported the natural condition.

3.2 The second largest of fishing producer in Indonesia :

Banyuwangi regency always consistent of producing the fresh fishes every year. It has 309 Fish Processing Units and has a Fishing Port in Muncar.

3.3 Banyuwangi has own ethnicity and language :

Banyuwangi has several tribes (Madura, Balinese, Chinese, Arabic, Java and Mandar), which the Osing is Banyuwangi's native tribe. The Osing tribe is the blended of Madurese, Balinese and Javanese tribes; which has its own custom language and also one of the oldest varieties of Javanese.

3.4 Banyuwangi has a lot of Tradition and Culture :

As we can see the Banyuwangi is the connector between Java and Bali islands. That's way it is visited by many tribes who have their own traditions and cultures.
Such as, Traditional Ceremony and Traditional Arts "Seblang, Rebo Wekasan, Kebo-Keboan", Sea Picking Ceremony, Puter Kayun, Barong Ider Bumi, Tumpeng Sewu, Obor Belarak, Gredoan, Pager Wesi, Endog-Endogan, Traditional Gandrung Art, Padang Ulan, Traditional Music Arts Angklung Caruk, Gedogan, Patrol, and etc.

3.5 Banyuwangi has many Tourist Spots :

Such as, Ijen Crater, Boom Beach, Plengkung Beach, Rajegwesi Beach, Red and Tabuhan Island, Watu Dodol, Green Bay, Lampon Beach, Blimbingsari Beach, Rawa Bayu, Lider Waterfall, Osing Tourism, Badeng River Rafting, Blambangan Park, Sritanjung Park, Tirtawangi Park, Alam Indah Lestari, Alas Purwo National Park, Merubetiri National Park, etc.

3.6 Banyuwangi has a variety of typical Banyuwangi foods :

a. The main course :
   The Tempong Rise, Cawuk Rise, Gecok Rise, Golong Rise, Satay Kalak, etc.
b. The typical of Banyuwangi snacks :
   The Bagiak, Kelemben, Satuh, Candied Cerme or Nutmeg dried or Tomato or Kolang - Kaling, Ladrang, etc.
c. The typical of Banyuwangi drinks :
   Secang, Selasih, Ronde, Angsle, Caok, Setup, Kolak, etc.
d. The typical of Banyuwangi souvenirs :
   Awug, Lanun, Serabi, Dodol, Jenang Ketot, Apem, etc.

Figure 9. The Traditional Music and The Tradisional Dance (source : Banyuwangi city-wikipedia)

Figure 10. The Traditional Fishing Port and The Ijen Crater at Banyuwangi (source : Banyuwangi city-wikipedia).

4. Conclusions

There are a lot of natural resources, and potential tourism to be used and developed in Banyuwangi. With all of these potential, it is possible for the local government to use it efficiently and effectively as a opportunity. Beside of those potentials, There are a lot of background peoples (Tribes, and Traditions) also in Banyuwangi. The local government should be awared of those as an "support" in maintain the development of Banyuwangi. Sustainable development without damaging the environment is recommended activities and should be applied on.

There are some advantages in using the natural resources. It is low cost (material and the maintenance), easy to recycle without damaging the environment. Furthermore, between the nature and humans should be worked simultaneously to improve the community welfare positively, as well as local government's foreign exchange increased.

The Formulation of Environmental Policy Instruments in Banyuwangi Regency, stated that :

1. Development in Banyuwangi Regency is environmentally specifically and sustainable, as seen in the construction of environmentally friendly integrated terminal. The implementation of development has integrated design. That's why tourism is environmentally and culturally oriented as local wisdom products.
2. Construction of 1000 Homestay in Banyuwangi to support the progress of regional tourism that is environmentally friendly. Thus domestic and foreign tourists can enjoy the beauty of the region and various interesting cultural products.
3. Construction of the Marina at Boom Beach is equipped the zoning with. It remains environmentally and prioritizes for the local wisdom there in.

Aknowledgement :

"According to Alexander, et al (1977), said that **Building must always be built on those parts of the land which are in worst condition, no account place buildings in the places which are beautiful"**. In fact do the opposite : considering in site and each building as a single living eco-system. Leave those areas that are the most precious. Beautiful, comfortable, and healthy as they are, and build the new structures in those parts of site which are the least pleasant now".

The bioregional transfers will become easier if they are crossed-cultural in depth. It could be done by collaborating and transferring the knowledge. It begins with the initiative of joint research and then the results are published through the seminar. Those activities should have been involved with the stakeholders such as local government, community leaders / non-governmental organizations and the broader community. Thus all of users can be known the positive purpose doing environmentally development. So that the possible conflicts between globalization and cultural sensitivity in each location will be minimized (in order to facilitate the implementation of conceptions have been prepared).

The step of development program could be learned from the successful Hokkaido community, such as :

- The people's way of life in Banyuwangi regency is always related with nature, as reflected in the relation of economic improvement with natural agricultural product. It means the natural value could be added to utilize the tourism sector
  The nature proximity expressed by celebrating Osing cultural festival activities that related with growing the season (source : Banyuwangi city- wikipedia).
- The lack of manufacturing industry contributes to the maintenance of the environment in Banyuwangi area. It provides quality farming and good fishery products which has a positive impact to all sectors.
- Wealth and coastal potential have abundant the fishery products. The stunning scenery with contoured hills, is promising the regional tourism asset for local government revenue.
- Maintenance of nature by reducing the manufacturing industry which is reducing deforestation condition.
- Growing interest in Banyuwangi community is to preserve the nature and natural features to be utilized in development. This condition is not surprising for the Hindu's Bali society in Banyuwangi because it can't be influenced. That could be seen the existence of ancient Hindu monasteries in the building's interior and the area that are still frequented by Balinese in Banyuwangi.
- Bioregional philosophy which is emphasizing of the four pillars, such as minimizing ecological damage, ensuring healthy air quality inside and outside spaces, reducing energy consumption, and creating the building area but still being environmentally. This condition has a positive impact to life span (source : Yamaguchi & Cohen, 2000). The philosophy aplication for the environment safety can do all of them that include "green building, good water circulation/ re-use, rain water harvesting, eco house and greening the settlement".
- Activities based on the philosophy have the commitment community to the context of bioregionalism in economy terms, culture and environment.
- Banyuwangi has a Regional Railway Transport maintained constantly which can be accommodated the large passengers number.That means more efficient and effective while also proving environmental maintenance. The number of the car and motorcycle would have been decreased by this public transportation .
- Beautiful and natural environments have such as the presence of steep hills, long beaches, much-breeding fisheries, coastal caves with stalagtites and stalagmites, fertile soil as a producer

of high quality rice, and lack of factories. Those potential keep the nature maintained, and the Osing culture has been remained. Those are the government asset's that has a high selling value to increase local government revenue as well as the welfare of the local community.

- Most important action of the community keeps the "green building and more innovation phenomenon". That action can support the prevention of environmental damage.
- Bioregional principles are not always applicable in every region to different regional conditions due. There is a transition of concepts to different philosophies in activities applicable.

As a development program, it can be implemented by using all materials from its natural resources. So many advantages on using this materials, such as low cost, low maintenance and the material could be recycle easily. There are some example or activities that can be implemented, such as :

- The used of materials from its own nature as a ingredients for the building and guesthouse. This materials could be used as a sustainable development program and also fit to its tropical climate.
- The used of Shells and coral as a sea wave breaker to protect the boats of the fisherman being damaged by the wave of the sea. The shells and corals are the one of potential resources that could be found easily, low cost, long term and easy to be maintained. The maintenance is required human discipline. These corals and shells should be stepped on by humans.

In conclusion, there are a reciprocal relationships between human beings as residents and environment as a land of daily life. This activity makes human can do their activity easily without damaging the environment. This reciprocal relationship will be on synergy with quality last longer. The humans are lived with nature but they still have anything to get some protector to survive in nature they live in, such as to build their own building. The humans can not escape from the nature in fact. Life can be peaceful when nature is domesticated. The nature will not be tampered with, but arranged in form of human beings that can move safely and comfortably.

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