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Theme:

Knowledge, Art and Change
in Response to Human Crisis

Keynote Speaker

■ Hilmar Farid

(General Directorate of Cultural, Ministry of Education
and Culture)

Distinguished Speakers

- ✓ **Chan Chee Ming**
(Universiti Tun Hussein Onn, Malaysia)
- ✓ **Elizabeth D. Inandiak**
(Institut Français d'Indonésie)
- ✓ **Dicky Sofjan**
(Universitas Gadjah Mada)
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Indonesia*

THEME

**KNOWLEDGE, ART AND CHANGE
IN RESPONSE TO HUMAN CRISIS**

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IN RESPONSE TO HUMAN CRISIS

THE GRADUATE SCHOOL
UNIVERSITAS GADJAH MADA
26-27 OCTOBER 2016

KEYNOTE SPEAKER

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PREFACE

FROM THE VICE DIRECTOR OF GRADUATE SCHOOL

In line with new paradigm as a research university, Graduate School of Universitas Gadjah Mada has annually been conducting International Graduate Student Conference (IGSC) as an international student publication media. Since 2014, to get more participants, the committee decided to extent the conference for scholars. Therefore the name of the conference is changed into International Graduate Students and Scholars' Conference in Indonesia (IGSSCI). The conference is an annual forum for academicians, researchers and practitioners in this graduate school to exchange knowledge and information in the broad area of social science and technology. The event has a pivotal role in improving research linkages in this region. This is in line with vision of the university which is to be a World Class University which is excellent, independent, dignified, inspired by Pancasila, the five-point ideology, and dedicated to the needs and welfare of the nation and the world and having mission as promoting excellent teaching-learning opportunities and community service through research with special mission : To promote excellence in educational activities, research, and community service with the interest of the Indonesian society and to participate in Indonesian socio-cultural building.

The theme of this year conference is Knowledge, Art, and Change in Response to Human Crisis chaired by Dr. M. Iqbal Ahnaf. The 2016 IGSSCI presented more than fifty papers talking about science, art, spirituality and local wisdom. The papers were splitted into several specific topics which are presented in plenary and parallel sessions: (1) Gender, Identity and Conflict: Literary Discourse; (2) Media and Art in Cultural Transformation; (3) Theory and Praxis of Religion and Public Policy: Reflections From Southeast Asia ; (4) Toward Engaged Knowledge: The Role of Higher Education in Social Change; (5) Consuming the Sacred: Spirituality and Tourism; (6) Religion and public life: how religion and spirituality shape visions on environment and governance; (7) Sustaining resilient communities: adaptation of local culture in disaster mitigation ; (8) Which Poor? Redefining poverty and poverty reduction; (9) Changing landscape of demography in democratizing Indonesia; (10) Toward sustainable tourism: local experience ; (11) Beyond tragedies: representating memoriea of wounds in contemporary art and literature ; (12) Disaster risk management: local practices and narratives; (13) Ways out of Water Crisis: Knowledge on Well and Water Quality; (14) Negotiating Gender and Religion; (15) The polics of representation: values and religion in popular culture ; (16) Toward food and energy security: findings from indonesian villages and (17) Knowledge on (in)tolerance: Peace Education and Counter-Terrorism. As the keynote speakers, the committee invited several reputable persons such as Dr. Hilmar Farid, Mrs. Elizabeth Inandiak, Prof. Dr. Sudibyakto, Dr. Chan Chee Ming, Prof. Dr. Tomas Lindgren, and Dr. Dicky Sofjan. I highly appreciate the speakers, participants and organizing committee who

have worked hard and made the conference realisable. We do hope that this conference will be useful for all participant and their institution. I really raise our apology for several inconveniences during the conference. I hope that it would be continued annually and it become our tradition in giving a solution for dissertation result publication.

Prof. Ir. Suryo Purwono, M.A.Sc, Ph.D

Vice Director of Graduate School

Universitas Gadjah Mada

LISTS OF CONTENT PROCEEDING OF THE IGSSCI VIII

	Preface <i>Prof. Suryo Purwono, MAsC, PhD</i> <i>vi</i>
	Introduction KNOWLEDGE, ART AND CHANGE IN RESPONSE TO HUMAN CRISIS <i>Mohammad Iqbal Ahnaf</i> <i>xv</i>
	Plenary BEBEKAN'S CHRONICLES DOWN-TO-EARTH ACTIONS WITH EARTHQUAKE SURVIVORS <i>Elizabeth D. Inandiak</i> <i>xiii</i>
Gender, Identity and Conflict Literary Discourse	THE SHIFTING PERSPECTIVE ON BEAUTY IN MORRISON'S GOD HELP THE CHILD <i>Ari Nurhayati, Wening Udasmoro, and Juliasih</i> <i>1</i>
	COLLECTIVE IDENTITY AS A RESOURCE AT BUILDING LOCAL PEACE: A STUDY OF THE WOMEN OF POKA, AMBON, MALUKU <i>Arifah Rahmawati</i> <i>6</i>
	FRENCH LOANWORDS AS A PART OF LIFESTYLE AND A DISTINCTION IN INDONESIAN CULINARY AND FASHION SECTORS <i>Hayatul Cholsy</i> <i>14</i>
	NEGOTIATION BY THE FEMALE LANGUAGE USER OF FRENCH IN INDONESIA: A SOCIOLINGUISTIC CRITICAL PERSPECTIVE <i>Merry Andriani, Wening Udasmoro, and Suhandano</i> <i>30</i>
	EMPOWERING THE UNIQUENESS OF INDONESIAN LANGUAGE AS RESPOND TO CULTURAL TRANSFORMATION NEEDS IN TRANSLATION <i>Ni Ketut Widhiarcani Matradewi, I Dewa Putu Wijana, M.A., and Wening Udasmoro</i> <i>35</i>
	WOMEN BETWEEN ARBEIT AND FAMILY: A FEMINIST CRITIQUE ON CAPITALISM IN THE NOVEL MOBING BY ANNETTE PEHNT <i>Syamsu Rijal</i> <i>43</i>
Gender, identity and conflict Case studies on environmental	GENDERED FILM ADAPTATION? AN INDONESIAN CASE STUDY <i>Christopher A. Woodrich</i> <i>48</i>

	THEY, THE BRAVE: NARRATIVES OF WOMAN'S AGENCY IN THE PEASANT MOVEMENT IN WONGSOREJO, BANYUWANGI <i>Dati Fatimah</i> 56
	THE ROOT OF FEMINISM IN LAKE TOBA ORAL TRADITION: FAMILY, ECOSYSTEM AND ECOFEMINISM <i>Elly Prihasti Wuriyani, Wening Udasmoro, and Lono Lastoro Simatupang</i> 63
	ART, CHANGE, AND COLLECTIVE MEMORY IN GERMANY: ETHNOGRAPHIC REFERENCE TO INDONESIA? <i>Vissia Ita Yulianto</i> 69
	THE POWER OF DISCOURSE IN PEACEBUILDING PROCESSES: POSITIONING MASCULINE AND FEMININE LANGUAGE <i>Wening Udasmoro</i> 76
Media and Art in Cultural Transformation	SLANKERS: BETWEEN PAIN AND DREAM I STANDING STUDY REGARDING IDENTITY, AESTHETIC EXPERIENCE AND FANTASY DEMOCRACY <i>Bayu Citra Raharja</i> 86
	EVENTS OF FESTIVAL AS THE ROOMS ARTS MANAGEMENT COLLECTIVE WORK PRACTICE; CASE STUDY YOGYAKARTA ARTS FESTIVAL 27TH 2015 <i>Hardiwan Prayogo</i> 99
Disaster risk management local practices and narratives	GROWING CHILDREN'S WATER CONSERVATION AWARENESS THROUGH WRITING AND DRAWING METHOD <i>Arundati Shinta, Fx. Wahyu Widianoro, Wira Widura2 and Dian Yudhawati</i> 115
	ULTI-HAZARDS ANALYSIS BASED ON LANDSCAPE APPROACH IN THE AREA OF YOGYAKARTA NEW AIRPORT SITE PLAN <i>Djati Mardiatno, I Made Susmayadi, Mutiah Faizah1, Umar Mustofa1, and Despry Nur Annisa Ahmad</i> 122
	ADAPTATION STRATEGY OF COMMUNITIES FACING COASTAL HAZARD IN DEMAK COASTAL AREA <i>Rika Harini, Esti Rahayu, Tiara Sarastika, and Sri Rum Giyarsih</i> 132
	SCIENCE AS SERVANT OF MAN AND

	ENVIRONMENTAL CONSTRAINTS IN NATHANIEL HAWTHORNE'S "RAPPACCINI'S DAUGHTER" <i>Simon Ntamwana</i> 138
Toward Engaged Knowledge the Role of Higher Education in social	THE ACADEMIC QUALITY ASSURANCE: EVALUATION OF LECTURER PERFORMACE IN TEACHING LEARNING ACTIVITY IN GRADUATE SCHOOL, UNIVERSITAS GADJAH MADA <i>Ana Anggraini, Kirbani Sri Brotopuspito, Sri Suning Kusumawardani</i> 147
	MA'HAD ALY AS HIGHER ISLAMIC EDUCATION IN THE RESURGENCE OF ISLAM NUSANTARA <i>Mochammad Maola</i> 164
Consuming the sacred spirituality and tourism	KNOWLEDGE, ATTITUDE AND BEHAVIOR OF THE LOCAL COMMUNITIES TOWARD THE PRINCIPLES OF SUSTAINABLE TOURISM <i>Janianton Damanik, Sucipto, and Debora Purba</i> 175
	BOOSTING THE SACRED, STIMULATING THE SECULAR: THE INTERMINGLED OF SACRED SITE AND SECULAR SPACE IN GROTTTO DE MARIA AMBARAWA <i>M Rizal Abdi</i> 188
	SHIFTING THE SENSE OF PILGRIMAGE: EXAMINING PETILASAN SUNAN KALIJAGA IN SUROWITI HILL, GRESIK <i>Taufiqurrohim</i> 197
	OPTIMIZATION MODEL ANALYSIS TO DEVELOP DESTINATION TRAVEL <i>Yuviani Kusumawardhani</i> 206
Religion and public life how religion and spirituality shape visions on environment and governance	ENVIRONMENTAL SCHOOL: DIGGING OF ECOLOGICAL CONCEPTS <i>Abdul Mujib</i> 216
	SPIRITUAL PRECARITY AND MENTAL ILLNESS REHABILITATION: THE WAY TO SPIRITUALITY DISCOURSE IN PUBLIC LIFE. <i>Ali Ja'far</i> 226
	ROLE OF ECO-PESANTREN ATH-THAARIQ FACING ENVIRONMENTAL DEGRADATION TODAY <i>Fahrurrazi</i> 235
Sustaining resilient communities'	THE SOCIO-CULTURAL INFLUENCE IN

adaptation of local culture in disaster	<p>COMMUNITY PREPAREDNESS FOR ENHANCING POST-DISASTER CAPACITY <i>Dina Ruslanjari, Awaluddin Ilyas, Bayu Kurnia Adhi and Resti Kinanthi</i>.....244</p> <p>COMMUNITY-BASED FOREST MANAGEMENT BY COOPERATIVE MOVEMENT: MANAGEMENT OF PRIVATE-COMMUNITY FORESTS IN KULON PROGO REGENCY, YOGYAKARTA SPECIAL PROVINCE <i>Imam Subekti and Edhi Martono</i>.....257</p> <p>THE EMPOWERMENT OF LOCAL FOOD COMMUNITY IN GENDER PERSPECTIVE (CASE STUDY IN MOROREJO VILLAGE TEMPEL SUB-DISTRICT SLEMAN REGENCY) <i>Mesalia Kriska, Sri Peni Wastutiningsih, and Suhatmini Hardyastuti</i>.....267</p>
Which Poor Redefining poverty and poverty reduction	<p>THE LIVELIHOOD CAPACITY OF WORKERS AS A BASIS FOR EMPOWERMENT IN INFORMAL SECTOR IN PALU MUNICIPALITY <i>Ellen Tantjaro</i>.....276</p> <p>LITERATURE REVIEW: TRANSFORMATIONAL LEADERSHIP AND BUSINESS PERFORMANCE : A CONCEPTUAL FRAMEWORK OF A TEST MODEL OF MEDIATION <i>Frian Violita Daraninggar and Titok Widodo</i>291</p> <p>POVERTY REDUCTION IN INDONESIA: OBSTACLES AND SOLUTIONS <i>Noor Cholis Madjid</i>.....299</p> <p>ULTRA POOR REVISITED: VILLAGE LEADERS' VIEWPOINTS <i>Sirirat Taneerananon</i>308</p>
Changing landscape of demography in democratizing Indonesia	<p>ASSESSING DYNAMICS OF DECENTRALIZATION IN INDONESIA <i>Dyah Estu Kurniawati</i>316</p> <p>SOCIO ECONOMIC DETERMINANT OF INFANT MORTALITY RATE IN WEST NUSA TENGGARA PROVINCE <i>Ifan Deffinika, Sukamdi, and Adi Heru Husodo</i>323</p> <p>FACTORS THAT AFFECT URBAN SPRAWL SYMPTOMS IN SUB URBAN AREAS OF YOGYAKARTA <i>Sri Rum Giyarsih and Najib Fauzi</i>333</p>

Toward sustainable tourism local experience	THE TRANSFORMATION OF LODGING SERVICES NEED: A CHALLENGE TO TOURISM WORKER <i>Agustina Multi Purnomo</i>348
	REJUVINATION OF GODEAN EEL CENTER AS A REGIONAL CULINARY TOURISM DESTINATION <i>Henry Prihanto Nugroho, Agus Amin Syaifuddin and John Suprihanto</i>362
	SUSTAINABLE TOURISM OBSERVATORY (STO), SUSTAINABLE TOURISM DEVELOPMENT ART DECO ARCHITECTURE <i>Muhamad and Jefrianus Immanuel Hingmo</i>369
Beyond tragedies representating memoriea of wounds in contemporary art and literature	HAJI KIAD AND KLON LAM TAT: SIAM'S CRIMES IN THE BANGKOKIAN MUSLIM'S VIEW (1920'S – 1930'S) <i>Artyasit Srisuwan</i>388
	CHARISMA AND GENDER: REVISITING MAX WEBER'S CHARISMA IN THE STUDY OF CHARISMA AND FEMALE CHARISMATIC LEADERSHIP IN KONYAK NAGA <i>Lemwang Chuhwanglim</i>399
	FESTIVALIZING TRAGEDY: THE CASE OF POST- REFORM CONTEMPORARY PERFORMING ARTS IN INDONESIA <i>M. Rizky Sasono</i>417
	WINTER FAIRS IN BANGKOK, THE REPRESENTATION OF PRE WWII BANGKOK LEISURE <i>Passavon Sungson</i>428
Knowledge on (in)tolerance Peace education and counter- terrorism	THE ROLE OF INDONESIAN GOVERNMENT IN PROMOTING INTER-RELIGIOUS HARMONY: A CASE STUDY OF FKUB IN PROMOTING INTERRELIGIOUS DIALOG <i>A. Pat Madyana</i>440
	THE ISLAMIC STATE, RELIGIOUS VIOLENCE, AND JUSTIFICATIONS OF BRUTALITY <i>Azis Anwar Fahcrodin</i>452
	VOICE VS NOISE: TECHNOLOGY-MEDIATED SOUND IN INTERFAITH DIALOGUE <i>Jeanny Dhewayani, Siti Syamsiyatun and Akhmad Siddiq</i>467

	BEING INCLUSIVE THROUGH MULTI AND INTER-RELIGIOUS DIALOGUE: A REFLECTION FROM THE PRACTICE OF MULTI AND INTER-RELIGIOUS DIALOGUE IN EDUCATION <i>Sari Oktafiana</i>478
Ways out of water crisis knowledge on well and water quality	CONVENTIONAL WELL INFLUENCE TOWARD THE ENVIRONMENT <i>Anastasia N. C. Purnamasari, Aristanti O. Dewi, and Desty N.</i>491
	WATER QUALITY AND WATER POLLUTION STUDY BASED ON GEOGRAPHIC INFORMATION SYSTEM IN BILI-BILI RESERVOIR, GOWA REGENCY, SOUTH SULAWESI <i>Sigit Heru Murti, Andi Rifani, Baiturrahmah</i>499
	THE EFFECTS OF SEDIMENTS CARRIED BY OVERLAND FLOW ON THE AFFECTIVITY OF INFILTRATION WELLS IN THE SUB URBAN AREA <i>Slamet Suprayogi, Sudarmadji, and Sri Lestari</i>509
	ENVIRONMENTAL RESTORATION OF THE WATER RECHARGE AREA AND DEVELOPMENT OF SPRING CHANNELIZED IN SOUTHERN PART OF MERAPI VOLCANO SLOPE FOR SUSTAINABLE WATER RESOURCE MANAGEMENT <i>Gunawan, T., Ardinugroho, A., and Agistria, R.</i>519
The politics of representation values and religion in popular culture	HALAL LABELING AND CERTIFICATION EFFECT ON FOOD PRODUCT’S COMPETITIVENESS TO ESTABLISH BUSINESS RESILIENCE <i>Armaidy Armawi and Raharjo</i>539
	DEFINING ‘SPORTS’ IN MODERN LIFESTYLE CONTEXT: CRITICAL DISCOURSE ANALYSIS ABOUT HEALTH IN LIFESTYLE MAGAZINE ANNISA (MAY EDITION 2013) <i>Qoriatul Mahfudhoh and Novita Dwi Wulandari</i>550
	ONLINE AL-QUR’AN RECITATION “ONE DAY ONE JUZ” ON WHATSAPP AND BLACKBERRY MESSENGER : CYBER RELIGION PRACTICE <i>Yul Rachmawati</i>560
Toward food and energy security findings from Indonesian villages	DESIGN OF SUSTAINABLE STAND-ALONE ENERGY SUPPLY SYSTEM FOR SMALL AND REMOTE ISLANDS IN INDONESIA: THE CASE OF AIR SENA VILLAGE <i>Zul Kariman, Himawan Tri Bayu, M.P, Ahmad Agus Setiawan</i>571

	SOCIAL SYSTEM ENGINEERING ON HORTICULTURAL AGRIBUSINESS DEVELOPMENT IN BATU <i>Sunarru Samsi Hariadi and Acep Hariri.....</i>	584
Toward Engaged Knowledge the Role of Higher Education in social	UTHM STUDENTS' INVOLVEMENT IN POST- FLOOD HUMANITARIAN MISSION AT BATU PAHAT, JOHOR: SISPA (SISWA SISWI PERTAHANAN AWAM), MALAYSIA <i>Adi H. Mohammad, Norsharina A. Rahman, Rahmat Sanudin and C. M. Chan</i>	595
	PERSONAL CHARACTER, INSTRUCTIONAL, AND RESEARCH SKILL: CONTRIBUTION OF HIGHER EDUCATION TO THE HUMAN RESOURCE DEVELOPMENTS <i>Beta Romadiyanti</i>	602
	SOFT SKILLS DEVELOPMENT AMONG UTHM STUDENTS ENGAGED IN EXTRA-CURRICULAR ACTIVITIES <i>Sharina, N., Hizami, A., Chan, C-M. and Md. Noor, N.....</i>	611
	MULTIPLE INTELEGENCE THEORY TEST IN STATE ELEMENTARY SCHOOLS BY STUDENTS OF ELEMENTARY SCHOOL TEACHER TRAINING, FACULTY OF EDUCATION AND TEACHER TRAINING, NUSA CENDANA UNIVERSITY IN KUPANG <i>Yosephina Katharina Sogen</i>	618

KNOWLEDGE, ART AND CHANGE IN RESPONSE TO HUMAN CRISIS

Introduction to
The 8th International Graduate Students and Scholars' Conference in Indonesia
(IGSSCI)

Mohammad Iqbal Ahnaf

The connections between Knowledge, Art and Change may seem self-evident. Many assume that knowledge and art are forces for change in and of themselves and, indeed, any revolutionary changes throughout the history of humankind have been driven by scientific inventions.

Human creativities like arts often inspire knowledge and thus lead to changes in the social and economic order. Dance, music instrument and culinary, for example, reflect unique ways of life in many communities. But the relationships among knowledge, art, and change are often ambiguous in origin or direction. On one side, knowledge and art can become the subjects or driving forces for changes in the ways human societies produce or consume food, establish security, solve limitations in movement, and reestablish boundaries as well as patterns of relationship between “ourselves” and “others.” On the other hand, knowledge and art may also be produced as instruments to maintain the status quo or prevent undesired changes as much as the means to promote desired transformation.

Despite this seemingly natural connection, gaps between the world of knowledge and art on one side and the practical world on the other side are often unclear. Policy makers are often not well informed by credible research findings; scholars and artists often do not define the relevance of their work to practical demands. We convene this conference in the conviction that creative cooperation across fields, disciplines, and contexts can lead to new insights for humanities.

Why knowledge and art? First, these two areas of human endeavors illustrate gaps in different discipline that need to be bridged. Of course there are many intellectuals who have passion as artists; likewise it is not difficult to find artists who grew in academic or intellectual atmosphere. However, many intellectuals and artists are not engaged to each other despite the fact that their works should be connected.

The importance of connecting scientific knowledge and arts has been acknowledged in the disciplines of communication and peace studies. Scholars like Lisa Schirch (in her book *Ritual and Symbol in Peacebuilding*, 2005) and Jayne Docherty (in her book *Learning Lessons from Waco: When The Parties Bring Their Gods in Negotiation Table*, 2013)), in their writings on *Peacebuilding Theory*, underlie three dimensions of human affairs. Drawing on communication studies John Cargan and Donald Shields, they emphasize that human affairs are always taking places in three arenas called rational, symbolic and relational dimensions.

Rational dimension is concerned with the issues that matters in human affairs. Speaking about issues is however not always delivered and received in uniformed way. Context of expressions, like language, power and authorities often matter more than the rational discussions of the issues. What is often

neglected in human affair is symbolic dimension which refers to worldview, values, identity and symbols that affect the ways people perceived and deal with the issues that matter in their daily life.

This conference aims to bridge the gaps between these three dimensions of human affairs. Academic or intellectual usually perceive the world in its rational dimension; while the artists mostly use symbolic dimensions. We hope this conference will provide great opportunities for exchanging perspectives and work of scholars as well as practitioners of different disciplines in addressing human crises.

Such a gap bridging of disciplines is illustrated in the first plenary session of the conference. Professor Sudibyakto who is a hydrologist and expert in disaster management will be in the same panel as Elizabeth Inandiak, an artist and writer on the Indonesian classic literary. Both of them have been working on the issues of disasters from different disciplines. Professor Sudibyakto will speak from the rational dimension using scientific studies of disaster and Inandiak will use the symbolic dimension of disaster by exploring local knowledge on tragedies. By providing the space for exchanges of perspectives between these scholars and practitioners from different disciplines we hope that gaps can be reduced and constructive collaboration will shed brighter opportunities in response of human crises.

Interdisciplinary study is not for Gadjah Mada University. In fact, the establishment of 1983, The Graduate School of Universitas Gadjah Mada in 1983 was aimed at opening more opportunities interdisciplinary studies. This 8th IGSSCI coincided with the 25th anniversary of the performing and visual art study program at this Graduate School.

We are very happy receiving many papers which demonstrate (potential) contributions towards the objective of change in its broader scope including alleviating poverty, conserving the environment, resolving conflict, eliminating diseases, and building a more just and equal society. There will be two plenary sessions addressing the conference related issue and 18 panel sessions which cover studies in social and scientific disciplines and offer insight into what it is that allows knowledge and art to affect (and effect) change in diverse contexts. In addition, it will explore the contestation between knowledge and the policy making and development sectors, and show what can be done to bridge the gaps between them. We have selected 72 papers of the 8th IGGSCI addressing aspects of the dialectical relationship between knowledge and art and change.

We hope that you will find this conference enriching and fruitful!

Yogyakarta, 20 August, 2016

ADAPTATION STRATEGY OF COMMUNITIES FACING COASTAL HAZARD IN DEMAK COASTAL AREA

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ABSTRACT

Demak coastal area is one of vulnerable areas to tidal flood. Tidal flood that occurs continuously has negative impacts on coastal communities. These negative impacts include the effects of physical, social, economic, and environmental. Thus the necessary existence of community adaptation strategies to face the tidal flood. This study aims to assess adaptation strategies of communities in Demak coastal areas. The methods used in this research are the field survey, in-depth interview and Focus Group Discussion (FGD). Field survey was conducted to collect data on the condition of research area. In-depth interview was conducted to obtain information from the relevant authorities, namely Regional Disaster Management Agency and Department of Public Work. Data were analyzed descriptively qualitative. The results showed that people in the Demak coastal area has several strategies to face tidal flood that often occur in the region. Adaptation is performed on residential buildings, roads, and ponds. Adaptations made by raising building houses, making embankment, planting mangroves in the coastal areas, and forming communities caring tidal flood.

Keywords: Adaptation Strategy, Coastal Area, Coastal Hazard, Tidal Flood

INTRODUCTION

Demak coastal area which is adjoining with Semarang coastal area has been affected by the disaster that occurred in Semarang coastal area. The most common disaster in the world is flood (Singh and Devkota, 2015). Almost along the coastal area in Demak experience tidal flood. This is in line with statement of Tu and Nitivattananon (2011) that coastal area has effect on sea level rise which is causing tidal flood. Some of the areas most severely affected by tidal flood is Sayung, Karang Tengah, and Bonang District. This tidal flood has negative impacts for community, especially for people who live close to the coastline. In addition to the social impact, people also feel the impact of the physical, economic, and environmental. That physical damage makes the social and economic activity becomes disturbed. Research on coastal disasters have been done, such as Mills et al. (2005) and Marfai et al (2008).

Kodoatied

- a. Land subsidence so that houses sinking and must be lifted. Roads and other public facilities should also be in lifted.

- b. Garbage carried by tidal flood causing residential areas and ponds look shabby. Garbage in the pond will also cause the fish died due to poison. While the waste that goes to the settlement will lead to disease.

a. Fishponds Flooded

b. Settlements and public facilities flooded

c. Land Subsidence

d. Trash carried by tidal flood

Picture 1. Various Major Problems Arise due to Tidal Flooding

The many problems posed by the tidal flood encourage people to form groups concerned the tidal flood. The groups that have been formed namely the mangrove group, fisherman group, and fish farmer group. Mangrove group came after there was problem of great tidal flood, abrasion, sea water intrusion, and land subsidence after the 2000s. Then in 2004 the Government initiated the formation of mangrove group to gather the villagers and do counseling about mangrove to the citizens. Residents are also invited to a comparative study in Banyumas Regency to know about breeding of mangrove. After that, mangrove group is formed and get any help from the government to multiply mangrove in this area until now. Fish farmer group appears, since tidal flood often occur with land subsidence had impacts in the paddy field near the coastal permanently submerged in water and finally converted as pond. The greatest landuse change from wetland to the pond started in the 2000s. Meanwhile, fishermen group had always been there in this area.

Various efforts have been made by community groups in Demak coastal area to address the issue of tidal flood disaster. One such effort is the planting of mangrove in the rural areas, rivers, and fishponds (Picture 2). However, mangrove planting indirectly to the sea because it is not an administrative area. There is also socialization to fish farmers and fishermen to participate on planting mangrove, to prevent the impacts of abrasion and tidal

flood (Picture 3). Making the dike around the pond is also done by farmers to prevent loss of fish from ponds. One thing that is also important is to comply with tidal flood's schedule from government, to anticipate the impact of tidal flood.

a. Newly Planted Mangrove

b. Existing Mangrove

Picture 2. Mangrove Planting

The formation of community groups in Demak coastal area give positive impacts on society. Mangrove planting reduce damage to embankment around the pond from the force of the tidal flood. Another benefit of planting mangrove in ponds is a spawning ground, habitat, obtaining nutrients for fish. This statement does not necessarily appear in public, once there was news blows that by planting mangroves in the pond will poison the fish in it. But after the group was standing, residents were given explanations and finally they changed their minds. Planting mangroves in the rivers bordering the sea also can protect water bodies from abrasion, so the river path is maintained.

Picture 3. Socialization of Government

Efforts undertaken society groups can not be separated from the constraints faced. Initially there were constraints of public trust in the benefits of mangrove, but then could be convinced to see the results directly. To convince the citizens, the group running the mangrove planting on their ponds. After that, when the benefits can already be seen and felt by the citizens, they will follow the other people who had planted mangroves. This is considered

very effective way to convince citizens. Another issue is the treatment of mangrove trees were pretty hard at the beginning of the planting.

Talking about community strategies, there are some parts that need to be discussed, social and economic strategies of society to face this disaster. Social strategy on community is coexist to the disaster (Picture 4). As it is said that the tidal flood is not a disaster which has once impact, but there was anytime happen and continuously. These conditions make the people become accustomed to the presence of the tidal flood. People can not do much to prevent tidal flood, because it is regarded as a complex issue and not just one area that must be rehabilitated to stop it.

Picture 4. Community Coexist with Tidal Flood

However residents still have the efforts (Picture 5). Before the tidal flood happen, people obey the flooding schedule given by the department of marine and fisheries. After looking at the flooding schedule, the people will know what must be done as elevating ponds embankment or go home to avoid roads inundated. When people have not obeyed this flooding schedule, then it becomes worse. Their ponds could be washed away or they will get stuck and not be able to go home because isolated by high tidal flood.

Strategies to elevate the building and the street is a strategy undertaken after tidal flood happened many times. So the people do not plan to elevate the building regularly. It has an impact on the economic strategy of its own citizens. People do not have the special economic strategies, such as having special saving to elevate the house, or insurance for his house. Beside the above problems, the lack of economic strategy also caused by the type of work whose the income is uncertain. When income from main employment is not enough, then the people will do the job diversification.

a. Making Road Embankment

b. Making Sewer

c. Elevating Building

d. Making Embankment in front of House

Picture 5. Adaptation Strategies of Community

One interesting thing is what will be done if the tidal flood become wider and the puddle become higher. People explained that they could not move out of this area despite the tidal flood will continue happen. The reason is their culture and their ancestors are from this land, so that they would not leave. Moreover, the reason "will move where?" is also a thorny issue. Considering they do not have land elsewhere, whereas if will sell the land that now has no value anymore. On the other hand, people retain their region because it has abundant natural resources. Marine products they get are still great, and shall be sufficient for their lives.

CONCLUSION

Demak coastal area is one of vulnerable areas to tidal flood. Tidal flood that occurs continuously has negative impacts on coastal communities. Various major problems arise due to tidal flood such as fishponds flooded, settlements and public facilities flooded causing damage, land subsidence, garbage carried by tidal flood causing residential areas and ponds look shabby and will lead to disease.

People in Demak coastal area has several strategies to face tidal flood that often occur in the region. Adaptation is performed on residential buildings, roads, and ponds. Adaptations made by raising building houses, making embankment, planting mangroves in the coastal areas, and forming communities caring tidal flood.

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