



PROCEEDINGS

The 4th International Conference on Sustainable Innovation (ICoSI) 2020

Cutting Edge Innovations for Sustainable Development Goals

Universitas Muhammadiyah Yogyakarta (Indonesia)

October 13 - 14 2020

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Focal Conferences



- ✔ (ICPU) The 2nd International Conference on Pharmaceutical Updates
- ✔ (ICOMS) The 6th International Conference on Management Sciences
- ✔ (ICLAS) The 9th International Conference on Law and Society
- ✔ (ICMHS) The 4th International Conference Medical and Health Sciences
- ✔ (ICAF) The 6th International Conference for Accounting and Finance
- ✔ (ILEC) The 2nd International Language and Education Conference
- ✔ (ICONURS) The 2nd International Conference on Nursing
- ✔ (ICITAMEE) The 1st International Conference on Information Technology, Advanced Mechanical and Electrical Engineering
- ✔ (IConARD) International Conference on Agribusiness and Rural Development
- ✔ (ISHERSS) The 2nd International Symposium on Social Humanities Education and Religious Sciences
- ✔ (ICONPO) The 10th International Conference on Public Organization
- ✔ (DREAM) The 5th Dental Research and Exhibition Meeting
- ✔ (ICHA) The 5th International Conference on Hospital Administration
- ✔ (ICOSA) The 3rd International Conference on Sustainable Agriculture





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Preface by the Chairperson of the 4th ICoSI 2020



Dr. Yeni Rosilawati, S.IP. S.E., MM.

Assalamu'alaikum Wr. Wb.

All praise is due to Allah, the Almighty, on whom we depend for sustenance and guidance. Prayers and peace be upon our Prophet, Muhammad SAW, his family and all of his companions.

On behalf of the organizing committee, it is my pleasure and privilege to welcome the honourable guests, distinguished keynote & invited speakers, and all the participants.

With the main theme of “Cutting-Edge Innovations on Sustainable Development Goals (SDGs)”, the 4th International Conference on Sustainable Innovation (ICoSI) 2020 serves as a forum to facilitate scholars, policy makers, practitioners, and other interested parties at all levels from Indonesia and abroad to present their novel ideas, promote cutting-edge research, and to expand collaboration network. The conference has about 1373 participants participating from more than 8 countries 4 continents all over the world, making this conference a truly international conference in spirit.

This multidisciplinary conference was first held in 2012 and has undertaken various changes and adopted to the current technological trends of our education system. From having this conference with just 175 participants back in 2012 we have come a long way in making the conference a huge success with more than 1373 participants participating in this two-day conference.

Formerly, this conference consisted of only 9 (nine) focal conferences. This year, there are 14 focal conferences from various disciplines, namely: 1) The 2nd International Conference on Pharmaceutical Updates (ICPU), 2) The 6th International Conference on Management Sciences

(ICoMS), 3) The 9th International Conference on Law and Society (ICLAS), 4) The 4th International Conference Medical and Health Sciences (ICMHS), 5) The 6th International Conference for Accounting and Finance (ICAF), 6) The 2nd International Language and Education Conference (ILEC), 7) The 2nd International Conference on Nursing (ICONURS), 8) The International Conference on Information Technology, Advanced Mechanical and Electrical Engineering (ICITAMEE), 9) The 2nd International Conference of Agribusiness and Rural Development (IConARD), 10) The 10th International Conference on Public Organization (ICONPO), 11) The 2nd International Symposium on Social Humanities Education and Religious Sciences (ISHERSS), 12) The 5th Dental Research and Exhibition Meeting (DREAM), 13) The International Conference on Hospital Administration (ICHA), and 14) The 3rd International Conference on Sustainable Agriculture (ICoSA).

Accordingly, We are proud to announce that this year, the 4th ICoSI 2020 breaks the Museum Rekor-Dunia Indonesia (MURI) record as the Virtual Multidisciplinary Conference with the Largest Number of Area of Fields in Indonesia

In addition, this year, this conference holds special value since this is the first conference in the history of our university where the entire conference is taking place remotely on a digital platform through the use of advance technologies due to the Covid-19 Pandemic.

I would take this opportunity to express my highest respect to the Rector of Universitas Muhammadiyah Yogyakarta, Dr. Gunawan Budiyanto who gave approval and ensured the maximal support from all the faculty members of Universitas Muhammadiyah Yogyakarta (UMY) that made this event a big success. In addition, my appreciation goes to all the support teams who have provided their valuable support and advice from planning, designing and executing the program.

Let me conclude my speech by encouraging the delegates to participate with an increasing number in all the activities and discussions through the digital platforms for the next two days. I wish everyone a successful, safe, and fruitful conference.

Thank you!

Wassalamu'alaikum Wr. Wb.

Yogyakarta, Indonesia, 14 October 2020



Welcoming Remarks by the Rector of Universitas Muhammadiyah Yogyakarta



Assoc. Prof. Dr. Gunawan Budiyanto

Innovation is the beginning of the development of technology, and technology is a development machine that is expected to provide benefits to humans and provide the smallest possible impact on environmental quality. In the concept of sustainable development, development must improve the quality of human life without causing ecological damage and maintain the carrying capacity of natural resources.

International Conference on Sustainable Innovation (ICoSI) is an international conference which is an annual conference held by the University of Muhammadiyah Yogyakarta (UMY), Indonesia. In 2020 this raises the issue of "Cutting-Edge Innovations on Sustainable Development Goals." Therefore, on behalf of all UMY academics, I would like to congratulate you on joining the conference, hoping that during the Covid-19 Pandemic, we can still provide suggestions and frameworks for achieving sustainable development goals.

About The 4th International Conference on Sustainable Innovation (ICoSI) 2020

Cutting Edge Innovations for Sustainable Development Goals

The 2030 Agenda for Sustainable Development is enacted by the United Nations as a shared blueprint for peace and prosperity for people and the planet, now and into the future. It consists of strategies to improve health and education, reduce inequality, and spur economic growth while also conserving natures by 2030.

This year, however, at the first one-third of its timeline, the SDG Reports shows that the outbreak of COVID-19 did hinder the achievement, or at least decelerate the progress of achieving the 17 goals. In fact, according to the report, “some number of people suffering from food insecurity was on the rise and dramatic levels of inequality persisted in all regions. Change was still not happening at the speed or scale required”, accordingly.

Therefore, in this event of pandemic, the quantity and quality of research, innovation, and more importantly multi-disciplinary collaboration are indispensable. Furthermore, there needs to be clear ends of those works. That is how those research are applicable and benefits directly to the society. That is how those research is incorporated as the drivers of policy making, and used practically in the society. Hence, the stakeholders especially the triple helix of higher education institution, government, and industry must be re-comprehended and supported to reach the common goal of the SGD.

International Conference on Sustainable Innovation (ICoSI) has been essentially attempting to strengthen this regard since its first establishment. One of the goals of ICoSI is to provide primarily a platform where scholars, practitioners, and government could grasp the development and trends of research. Hopefully, meeting these actors altogether would result in stronger collaboration, sophisticated and advantageous research, and brighter ideas for further research. Based on these reasoning, this year, the 4th ICoSI 2020 UMY is themed ‘Cutting-edge Innovations for Sustainable Development Goals’.

Improving from last year conference which brought nine focal conference, this year ICoSI 2020 UMY brings 14 disciplines, from social sciences, natural sciences, and humanities. ICoSI 2020 received as much as 1005 papers. The paper works submitted in ICoSI 2020 UMY will be published in Atlantis Proceedings, IOP Proceedings, National/International Journals, and ICoSI ISBN-indexed Proceedings.

Nevertheless, ICoSI believes that publication is only the beginning of research dissemination. The publications will enhance the chance of the research known by wider audience, and then used, applied, and incorporated at either system, institutional, or personal level of human lives.



CONTENTS



The 4 th ICoSI 2020 Committees	2
Reviewers of 4 th ICoSI 2020	5
Preface by the Chairperson of the 4 th ICoSI 2020	7
Welcoming Remarks by the Rector of Universitas Muhammadiyah Yogyakarta.....	9
About The 4 th International Conference on Sustainable Innovation (ICoSI) 2020	10
CONTENTS	11
TRACK ECONOMICS, LAW, EDUCATION, SOCIAL, AND HUMANITIES	15
A Policy Analysis for Building Regulation in Disaster Situations on Sleman Regency	16
Wisnu Dimas Punto Aji ^{1,*} Dewi Sekar Kencono ²	16
Valuation of a Declining Oilfield under Stochastic Oil Prices and Non-Constant Interest Rates	20
Fransiscus Pratikto ^{1,*} , Sapto Indratno ² , Kadarsah Suryadi ³ , Djoko Santoso ⁴	20
The Dispute Board as an Alternative to the Construction Service Disputes Settlement.....	26
Fadia Fitriyanti ^{1,*} Emil Adli ²	26
The Promotion and Protection of Human Rights in Islam for Creating the Culture of Peace	33
Martinus Sardi ^{1,*}	33
Trusts Concept Settings in Management Limited Company.....	39
Reni Anggriani ^{1,*} King Faisal ²	39
Legal Protection of Nurses in Health Care Efforts During the co-pandemic Period 19	43
Reny Suryanti ^{1,*} Nyoman Putra Putra ²	43
Effect of Parenting against Smartphone Addiction	47
Mawaddah Nasution ^{1,*} , Siswanto Masruri ² , Khoiruddin Bashori ³	47
Model of Organizing Film Productio Amid the Covid-19 Outbreak in Indonesia.....	51
Citra Dewi Utami ^{1,*}	51
Accountability of Village Fund Allocation Management (ADD) in Village Government.....	56
Mohamad Sukarno ^{1,*}	56
Effect of Parenting against Moral Development of Children Aged 4-10 Years	62
Widya Masitah ^{1,*} Asmadi Alsa ² Abd.Madjid ³	62
The Influence of Family Communication on Children’s Social Competence at SD Ar-Rahman Full Day School Medan.....	67
Juli Maini Sitepu ^{1,*} Asmadi Alsa ² Abd.Madjid ³	67
The Integration of Law and Religion for New Civilization in Indonesia	72
Dewi Nurul Musjtari ^{1,*} Nurmawati ² Zola Fi Dinillah Halim ³	72
Head of East Java Aisyiah Board Women’s Empowerment Methods in Realizing Sustainable Development Goals Di Indonesia.....	78
Nur Azizah Hidayat ^{1,*} Iman Zukhrufi Nur Azzam ²	78
Optimization of Child-Friendly City Development Policy in Yogyakarta City	89
Septi Nur Wijayanti ^{1,*} Hanum Salsabila ²	89
The Obligation of Indonesian Government to Ratify the Rome Statute for the Global Justice	98
Muhammad Nur Islami ¹ , Martinus Sardi ²	98
Legal Politics of Restoration of Indonesia’s State Policy Post Amendment of the 1945 Constitution	103
King Faisal Sulaiman ^{1,*}	103
Competition Price Regulations in an Islamic Perspective: Determination of the Aircrat Ticket Tariff	109
M. Tri Saputra ^{1,*} Mukti Fajar ND ²	109
Romanticism Dyanamics of Legal Politics Protection and Management of Environmental Protection to Indonesia’s Ecocracy	116
Al Qodar Purwo S ¹ , Nur Azizah Hidayat ² , Iman Zukhrufi Nur Azzam ³	116
Ambiguity of Environmental Economic Instruments between Ecological or Economic Interests, in Controlling Environmental Damage in Special Region of Yogyakarta.....	123
Sunarno ¹ Arvin Setiyana Dewangga ²	123
The Law Enforcement against a Non-Sharia Compliance Banking Transaction by the Financial Services Authority in Indonesia	130
Dewi Nurul Musjtari ^{1,*} Nasrullah ² Aunurochim Mas’ad ³ Nurmawati ⁴	130



Shariah Audit Expectation-Performance Gap in Malaysian Islamic Banks.....	137
Supiah Salleh ¹ , Mustafa Mohd Hanefah ² , Zurina Shafii ³	137
Students' Attitudes towards Blended Learning Implementation in a private university of Yogyakarta	144
Avita Elok Faiqoh ¹ , Eko Purwanti ²	144
How Millennial Think About Privacy Concern?	152
Anissa Hakim Purwantini ¹ , Betari Maharani ¹	152
Impact Of Changes in Psak on the Competence of Lecturers and Students Understanding Levels.....	157
Duwi Rahayu ^{1*} , Imelda Dian Rahmawati ^{1*} , Bayu Hari Prasajo ¹	157
The Influence of Internal Locus of Control, Idealism, Ethical Knowledge, and Gender on Accounting Students' Ethical Perception.....	167
Aji Baskoro ^{1*} , Dyah Ekari Sekar Jatiningsih ¹	167
Effect of Net Income, Rupiah Exchange Rate, Interest Rate dan Inflation on Stock Price	174
Edon Ramdani ^{1*} , Zehan Nur Apsah ²	174
A Comparative Analysis on the Recognition of Zakat in the Taxation Systems of Malaysia and Indonesia	187
Suhaila Abdul Hamid ^{1*} , Ickuk Rangga Bawono ^{2*} , Ayu Ratu Wulandari ²	187
Developing an Environmental Tax Framework for Malaysia:	192
Izlawanie Muhammad ^{1*} , Norfakhirah Nazihah Mohd Hasnu ²	192
Determining Factors for Success Use of E-Learning in Learning Process in College.....	196
Mohammad Alfian ^{1*} , Hikmatul Maulidah ²	196
Effect Of Money Ethics And The Use Of Siskeudes On The Level Of Fraud In Village Fund Management With Religiosity As A Moderation Variable.....	202
Elisa Purwitasari ^{1*} , Mohammad Alfian ^{1*} , M. Sofyan Firman Syah ^{1*}	202
The Relationship between Performance Based Budgeting Implementation, Budget Absorption, Accountability and Local Government Performance.....	208
Parwoto ^{1*}	208
The Influence of Information Technology (IT) on Accrual Accounting Adoption of the Jordanian Public Sector .	217
Moawiah Awad Alghizzawi ^{1*} , Rosnia Masruki ¹	217
The Effect of Professional Skeptisism, Auditor Expertise, and Integrity of Audit Quality.....	224
Ruci Arizanda Rahayu ^{1*} , Sarwenda Biduri ^{1*} , Mahardika D. Kusuma Wardana ^{1*}	224
E-Procurement and Effectiveness of Internal Controls on Fraud Prevention	231
Sarwenda Biduri ^{1*} , Wiwit Hariyanto ^{1*} , Ilmi Usrotin ¹	231
Usefulness of Accounting Information in Predicting Hedging Decision	234
Sustari Alamsyah ^{1*} , Triana Zuhrotun Aulia ¹	234
Religious Belief & Halal Cosmetic Products Consumption	241
Tanti Handriana ¹ , Praptini Yulianti ² , Ryan Bayu Permana ³	241
Does Corporate Social Responsibility Disclosure Affect Profit Sharing Ratio?	246
Veni Soraya Dewi ^{1*} , Fritztina Anisa ^{1*} , Faqiatul Mariya Waharini ¹	246
Determination Analysis Affecting Intellectual Capital Disclosure and Its Effect on Market Performance and Cost of Equity Capital.....	252
Wawan Sadtyo Nugroho ^{1*} , Nia Kurniati Bachtiar ¹	252
TRACK HEALTH AND NURSING SCIENCE	261
The Effect of Assertive Behaviour Therapy towards Bullying Behavior in Adolescents	262
Chindy Maria Orizani ^{1*} , Dwi Yuniar Ramadhani ²	262
Characteristics and Level of Knowledge of Newborn Baby Care in Pandemic Covid 19	265
Devita Elsanti ^{1*} , Diyah Yulistika Handayani ²	265
Risk factors for disease severity in paediatric patients with Covid-19: A literature review	269
Eka Oktavianto ¹ , Gani Apriningtyas Budiyati ² , I Made Moh. Yanuar Saifudin ^{3*} , Endar Timiyatun ⁴ , Aris Setyawan ⁵	269
The Role of Self-Efficacy and Family Support in Improving the Quality Of Life of Patients with Hypertension ...	276
Erni Tri Indarti ^{1*} , Oktaffrasya Widhamurti ² , Remita Yuli Kusumaningrum ³	276
The Influence of Head Nurses Supervision on Discharge Planning Completeness	280
Etik Kustiati ^{1*} , Vivi Yosafianti Pohan ²	280
Lemon and Rose Aromatherapy Reduce Blood Pressure in Preeclampsia during Pregnancy	284
Etika Purnama Sari ^{1*} , Dewi Andriani ²	284



Phenomenology of Acceptance Process and Self Concept Changes of the Hernia Post-Surgery Clients in Kebumen Regency, Central Java Indonesia	288
Ike Mardiaty Agustin ¹ , Doni Kurniawan ² , Sawiji ³	288
The Role of Family Support to Medication, Diet and Activity of Diabetic Patients.....	292
Indah Wulandari ^{1,*} , Kusnanto ² , Sony Wibisono ³ , Dwi Abdul Aziz ⁴	292
The Effectiveness of Giving Fe Tablet in Increasing Hemoglobin Levels in Adolescent at Vocational School of Swadaya Temanggung.....	297
Halimah Sarjiyati ¹ , Luluk Rosida ^{2,*}	297
The Effect of Passive Physiotherapy on Hemodynamic Status of Patients with Head Injury: A Literature Review	300
Ni Luh Seri Astuti ¹ , I Made Moh. Yanuar Saifudin ^{2,7,*} , Novida Prima Wijayanti ³ , Marsha Yoke Nancy ⁴ , Ahmad Firdaus ⁵ , Sri Setiyorini ⁶	300
The Effectiveness of Cognitive Behaviour Therapy towards Hallucination Intensity in Skizofrenia Patients.....	312
Noviana Ayu Ardika ^{1,*} , Mohammad Fatkhul Mubin ²	312
The Effect of Tuberculosis Event on the Self-Concept of Positive Pulmonary Tuberculosis and Negative Pulmonary Tuberculosis	316
Nurbaiti ¹ , Meynur Rohmah ^{2,*}	316
An Overview of the Implementation of IMCI in Primary Health Community of Bantul and Yogyakarta City.....	320
Rahmah ^{1,*}	320
The Influence of Cervical Cancer Education on Cervical Cancer Prevention Behaviour in Women of Childbearing Age: a Literature Review	325
Riska Putri Miharja ¹ , Enny Fitriahadi ^{2,*}	325
Family Support for Type 2 DM Patients in Controlling Blood Sugar levels in Kebonsari Surabaya	330
Rusdianingseh ^{1,*} , Difran Nobel Bistara ²	330
Relationship Family Support with Menstrual Hygiene Behavior in Early Adolescents.....	333
Julita Kartrikasari Eka Pratiwi ¹ , Sarwinanti ^{2,*}	333
Risk Factors of Stunting: A Literature Review	339
Sholihah Gustavia Yolanda ^{1,*} , Ellyda Rizki Wijhati ²	339
Analysis of Education and Family Income Factors on Caregiver Burden in Elderly Care at Community Health Center of Perak Timur	345
Siti Aisyah ^{1,*} , Gita Marini ²	345
Analysis of Diet Compliance in Patients with Diabetes Mellitus on the occurrence of complications in the Polyclinic in Nganjuk Regional Hospital.....	350
Sony Wahyu Tri Cahyono ^{1,*} , Laili Indana Lazulva ² , Indah Permatasari ³	350
Anti-Cancer Activity of Ants Nest Plant (<i>Myrmecodia Pendans Merr. & Perry</i>) on Protein Transduction Signal Resistance Complex CDK-2-Cyclin-E and NF-Kb: Silico Molecular Docking Study.....	354
Ana Medawati ^{1,*} , Supriatno ² , Sofia Mubarika ³ , Sitarina Widyarini ⁴	354
Black Triangle Treatment with Non Surgeryaesthetic Restoration (Case Report).....	358
Any Setyawati ^{1,*}	358
The Effect of Rosella Flower Tea Solution Onto Discoloration of Plate Heat Cured Acrylic Resin Base	361
Fransiska Nuning Kusmawati ^{1,*} , Tabitha Nurul Arifa ²	361
Management of Dental Mobility with Combinations of Splinting And Jacket Crown.....	367
Hartanti ^{1,*}	367
Dental Service Time in the Implementation of Indonesia National Health Insurance Based on the Highest Dental Treatments At Primary Care	370
Iwan Dewanto ^{1,*} , Sharon Sesita Frinces ²	370
The Oral Hygiene Level Of Dentistry School Female Students Using Fixed Orthodontics	374
Muhammad Shulchan Ardiansyah ^{1,*} , Rizki Adzhani Nur Shabrina ²	374
Radix Anchor Post as Intracanal Retention in Porcelain Fused Metal Crown Restoration.....	378
Nia Wijayanti ^{1,*}	378
Correlation between Dental Behavior and Dental Caries Status (DMF-T) of Pendul Community Sedayu District Bantul Yogyakarta	381
Novitasari Ratna Astuti ^{1,*}	381
An Evaluation of the Training of Structured Feedback with 4c/Id Method in Clinic Advisors.....	385





Nyka Dwi Febria ^{1,*} , Mora Claramitha ² , Widyandana ³	385
Halal and Tayyib is The New Life Style of Food Consumption in Achieving Sustainable Development Goals ...	389
Arif Pujjiono ^{1,*}	389
Entrance and Exit Wound in Gunshot Death Cases at Forensic and Medicolegal Installation of Dr. Soetomo Hospital in 2019: Case Study	392
Desy Martha Panjaitan ^{1,*} , Ahmad Yudianto ² , Ariyanto Wibowo ³	392
Measuring Urban Self-Payers' WTP for the JKN-KIS Health Insurance: A Choice-Based Conjoint Approach ...	395
Fransiscus Rian Pratikto ^{1,*} Rika Teddy ²	395
Level of Lipoprotein (a) as A Predictive Factor for Coronary Thrombus.....	400
Iin Novita Nurhidayati Mahmuda ^{1,*}	400
The Influence of Health Education (Health Promotion) Breast Self Examination (BSE) Against Behavior of BSE (Knowledge, Attitudes, and Action) Student of Madrasah Aliyah Ar-Raudlatul Ilimiyah Islamic Boarding School Kertosono in Early Detection of Breast Cancer	403
Lina Nur Hidayah ^{1,*} , Nurma Yuliyanasari ² , Musa Ghufro ³ , Muhammad Anas ^{4,*}	403
Case Report: Misdiagnosis Case Of Nasopharyngeal Carcinoma in Patient with Chronic Rhinosinusitis: Family Doctors Awareness is Essential	408
Oke Kadarullah ^{1,*}	408
The Effectiveness of Iler Leaf (<i>Plectranthus Scutellarioides</i> [L.] R.Br. <i>Folium</i>) on the Healing Process (Diameter) Of Burn Injury Grade II A on White Mouse (<i>Rattus Norvegicus</i>) Wistar Strain.....	411
Wulandini Ayuning Dinda ^{1,*} , Kusumawinakhyu Titik ² , Bahar Yenni ³ , Romdhoni Fadhol Muhammad ⁴	411
Influence of Body Height on Central Motor Conduction Time Using Transcranial Magnetic Stimulation	415
Yetty Hambarsari ^{1,*} , Priyanka Ganesa Utami ² , Rivan Danuaji ³ , Baarid Luqman Hamidi ⁴ , Subandi ⁵ , Sulistyani ⁶	415
The Effect of <i>Phoenix Dactylifera Pollen</i> on Histology Liver of <i>Rattus norvegicus</i> Exposed with Air Fresheners.....	419
Yuningtyaswari ^{1,*} , Mega Silviana Dewi ²	419
Comparison of Dominant and Non-Dominant Hemisphere Cortical Excitability Using Transcranial Magnetic Stimulation	425
Yetty Hambarsari ^{1,*} , Baarid Luqman Hamidi ² , Rivan Danuaji ³ , Priyanka Ganesa Utami ⁴ , Sulistyani ⁵	425



TRACK ECONOMICS, LAW, EDUCATION, SOCIAL, AND HUMANITIES



The Dispute Board as an Alternative to the Construction Service Disputes Settlement

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ABSTRACT

Dispute settlement through the dispute board is an alternative to settling new disputes that are not regulated in Law Number 30 of 1999 concerning Arbitration and APS. The specific objectives to be achieved in this study to look for data and examine the forms of construction service disputes that are resolved using the dispute board. This research is normative juridical research. Primary data were obtained through an interview with the Head of Sub Directorate of JBH (Freeway). Secondary data were obtained from documents in the research location above. Data analysis methods used in this study are statutory approaches and conceptual approaches. The research was analytical descriptive. The forms of Dispute Construction Services using the Dispute board can be seen in various criteria.

Keyword: Dispute Board, Alternative Dispute Resolution, Construction Service.

1. INTRODUCTION

Construction service is one sector that is quite vulnerable to disputes. According to Bambang Poerdyatmono, the construction service dispute can be divided into three stages, namely the stage before the implementation of construction services, the stage of construction services implementation, and the stage after the implementation of construction services (operational stage). Besides settling disputes in construction services through the Court, it can also be resolved outside the Court. Settlement of disputes outside the court is regulated in Law Number 30 of 1999 concerning Arbitration and Alternative Dispute Resolution

(hereinafter referred to as the Arbitration Law). There are two ways of dispute resolution in the Arbitration Law, Arbitration or APS: Consultation, Negotiation, Mediation, Consolidation, and Expert Assessment.

Besides that, in Law Number 2 of 2017 concerning Construction Services Article 88 paragraph 2, namely settlement of construction service disputes can be resolved by deliberation, if the parties cannot reach an agreement, the parties go through the stages of dispute resolution efforts contained in the construction work contract that is through mediation, conciliation, and arbitration and forming a dispute board. This settlement method is a new method that is unknown in Law Number 30 of 1999. A further selection of dispute board membership is regulated in Government Regulation No. 22 of 2020. Before the regulations were issued, it turned out that the dispute board concept had begun to be applied for example in the TPA development package Trash in Jambi City, Malang City, Sidoarjo Regency,

and Jombang Regency, Toll Road Development Package of Cileunyi-Sumedang-Dawuan Phase III (Cisumdawu III), Development Package for Patimban Port Access Road, Hydromechanical Works for Construction of Karian Multipurpose Dam Project packages, and Emission Reduction in City Solid Waste Management Program package Municipality of Malang and Sidoarjo. Besides that, there are also many construction projects funded with foreign loans such as the World Bank, Asian Development Bank (ADB), Islamic Development Bank (IDB), Japan International Cooperation Agency (JICA) and other lenders, generally requiring standard contracts FIDIC (Federation Internationale des Ingenieur-

Conseils). In all FIDIC contract standards, an alternative dispute resolution effort is provided, known as the Dispute board. For this reason, it is necessary to study the forms of construction service disputes using the dispute board.

2. DISPUTE SETTLEMENT THROUGH THE DISPUTE BOARD

The dispute board establishment is a new matter regulated in the Construction Services Law No. 2 of 2017 Article XI, where the method of dispute settlement through the dispute board (DB), appears as an alternative to the settlement of construction disputes in Indonesia. This settlement method is a new method that is not known in Law Number 30 of 1999. The understanding of the Dispute Board according to Law Number 2 of 2017 in the Elucidation of Article 88 paragraph 5 referred to as the dispute board is a team formed based on the agreement of the parties since the binding of Construction Services to prevent and mediate disputes that occur in the implementation of

Construction Work Contracts. However, the existence of a dispute board in Indonesia is still unclear because it still requires development and maturation. The dispute board has been widely used, used successfully through the Eisenhower project in the United States. The Eisenhower Memorial Tunnels, located about 60 miles west of Denver in Colorado. The owner is the Colorado Department of Motorway, now the Colorado Department of Transportation. The Eisenhower Memorial Tunnels successfully as the first case used the dispute board, as part of the original contract documents, the DRB settled three disputes.

Some institutions have standard rules regarding the Dispute Board:

a. ICC Dispute Board Rules

The first edition of the Dispute Board Regulation by the ICC was adopted in 2004. The ICC Dispute Board regulation was then revised in 2015 based on the judgment of experts, in order to adapt to the requirements of modern practice, with the emphasis being placed mainly on dispute avoidance and informal assistance. The revised rules took effect as of October 1, 2015, and are available online in English, French, Spanish, Portuguese, and Arabic. The ICC has also developed a model of the Dispute Board member agreement to be signed by all members of the Dispute Board and parties before the Dispute Board activities can begin and the ICC Dispute Board standard clause for parties wishing to establish and operate a Dispute Board under the 2015 Regulations. Important features of The 2015 regulation is their attempt to strengthen the binding power of the *vis-à-vis* decision of the parties by expressly providing that a party that has failed to abide by the Dispute Board's conclusion, and under the rules will not cause any problems to the Service as a defense for failure to comply (articles 4(4), 5(4) and 6(1) of the 2015 ICC Rules). This approach is intended to avoid attempts to refute the benefits of any conclusions that have become contractually binding.

b. FIDIC Disputes Adjudication Boards

FIDIC has a long history of publishing standard contract forms for works. FIDIC contracts are the standard form of international construction contracts most commonly used in the world today. Each of the 1999 FIDIC contracts, the Red Book, the Yellow Book, and the Silver Book, adopted a multi-layered approach to dispute resolution which included the appointment of a Dispute Adjudication Board ("DAB") to adjudicate disputes arising during project implementation.

There are two types of DABs in the form of FIDIC:

1. Standing DAB, designated by the parties at the beginning of the contract and remain in place until the end of the contract; and

2. Ad-hoc DAB, designated after the dispute arises.

Here is an explanation of the ad-hoc and standing Dispute Board:

1. Ad-hoc Dispute Board: Ad-hoc DAB, appointed after a dispute arises
 - a. Created only after a dispute arises
 - b. There are no rules to avoid disputes
 - c. The decision is binding, except for ad-hoc DRB, it is only recommendations
 - d. Its function is to end the dispute

2. Standing Dispute Board:

Standing DAB is appointed by the parties at the beginning of the contract and remains in place until the end of the contract.

- a. Formed from the beginning of the contract, until the construction contract is completed
- b. Conduct field trips and attend meetings
- c. Has a role in avoiding disputes
- d. Informal opinion
- e. The decision is binding
- f. Become a party that stays in the contract and visits places regularly
- g. Always follow developments and potential problems in the field
- h. Encourage the parties to resolve the problem before the dispute arises more severely
- i. Judge the intended dispute

c. World Bank Dispute Review Board

The World Bank has developed the Standard Bidding Documents for Works ("SBDW") to borrowers in the procurement of certain contracts through international competitive bids. SBDW is renewed every few years. In 1995, the World Bank first introduced the requirements for the dispute review board in SBDW based on the FIDIC Red Book. Until now, the World Bank continues to support the use of the Dispute Board in the implementation of its financial projects by preserving the provisions for the establishment of the board in the updated SBDW.

d. AAA Dispute Resolution Board Guide Specifications

The American Arbitration Association published the guidance specifications for the Dispute Resolution Board on December 1, 2000, a stand-alone document, which could be included in any contract. Two guide specification features that users must consider are:

AAA's heavy involvement in the process, among others, providing a list of prospective members of the dispute board, scheduling meetings and site visits, communicating minutes of meetings and

recommendations of the dispute board to the parties, which should increase a sense of neutrality; and

The process of nominating a member of a dispute Board that has the potential to be a process drawn out if it is one of the parties' objects. In particular, the opposing party is also allowed to reject the nomination of a member of the Board without stating the reasons for opposition.

e. CI Arb Dispute Board Rules

The Chartered Institute of Arbitrators issued a Dispute Board Regulation in 2014. This Rule consists of 18 Articles, followed by a standard tripartite agreement for the Dispute Board.

f. DBF Ad Hoc Dispute Adjudication Board Rules

The Dispute Board Federation announced ad-hoc Disputes Adjudication Rules in 2011. Rules available to be used in Dispute Board are managed independently. Thus, the adoption of ad-hoc rules can be a cost-effective solution for those who want to avoid administrative costs imposed by other institutions.

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The clause in the FIDIC contract provisions regarding claims and dispute settlement is clause 20, but there is also a clause 3.5, which is the first clause regarding initial action must be taken to resolve the dispute. "Whenever these Conditions provide that the engineer shall proceed in accordance with this Sub-Clause 3.5 to agree or determine any matter, the engineer shall consult with each party in an endeavor to reach an agreement. If the agreement is not achieved, the engineer shall not make a fair determination in accordance with the Contract, taking due regard to all relevant circumstances." The engineer must notify both parties of each agreement, with specific support, within 28 days of receipt of the request unless determined otherwise. Each party will enforce any agreement or determination unless revised based on clause 20 (claims, disputes, and arbitration).

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Dispute settlement is an effort to dispute avoidance, as well as efforts to dispute resolution. Dispute avoidance focuses on reviewing the problem status and seeking opinions at the beginning of the dispute so that the problem can be resolved immediately. Dispute avoidance conducted by the dispute board is by conducting regular meetings in the field (project site) with related parties both the owner (service user) as well as the contractor (service provider) with the intention of conducting inspections so that the dispute board has the same information between in the reports and field. In addition, the dispute board facilitates good communication between the parties so that the dispute board can also help resolve issues at the work level because the dispute board has the right to provide informal opinions to avoid potential disputes.

While the way of dispute resolution, the owner (service user) and the contractor (service provider) both have the right to ask for a referral to the dispute board, then procedurally the dispute board will hold hearings, bring witnesses, up to questions, and consider within a limited time that has been mutually agreed upon. The establishment of DB is not only to settle disputes but

also prevents the spread of problems. DB focuses on resolving disputes outside the court with the aim of successfully resolving disputes. DB is considered suitable for resolving disputes in order to save project costs and controlling time in the project schedule.

3. A REVIEW REGARDING CONSTRUCTION SERVICES DISPUTES

A construction service dispute is a construction agreement dispute which in the Western world is called a construction dispute. It occurs in connection with the implementation of the construction work between the parties mentioned in a construction agreement. Some expert opinions in the field of construction regarding construction service disputes, Chow Kok Fong stated that "... the difference in position over matter which is submitted for determination by a tribunal. A dispute does crystallize where a party merely requests another party for more information to explain the items featured in a matter or to allow more time for more careful consideration of the matter." The construction disputes referred to here are disputes in the civil field which according to Article 5 of Law Number 30 Year 1999 can be resolved through Arbitration or Alternative Dispute Resolution Paths.

4. MATERIALS AND METHOD

4.1. Types of Research

This type of this research is a normative juridical study, which is a method of legal research conducted by reviewing library material or secondary data based on primary legal material by examining legal norms, legal principles, legal theories, legal regulations laws and literature relating to this research.

4.2. Research Approaches

The research approach used in this study is the statute approach and the conceptual approach.

4.3. Data Collection

The data collection method used in this research is to conduct a literature study and interviews related to this research with Mr. Indra Rismawansyah., Tollroad Sub Directorate Section Chief (JBH), Jakarta, Indonesia.

4.4. Data Analysis

The data analysis method in this research is descriptive qualitative and prescriptive methods.

5. RESULTS AND DISCUSSION

5.1. Forms of Construction Services Dispute by the Dispute Board

Alternative Dispute Resolution (ADR) procedures have emerged as alternative mechanisms for resolving

construction disputes outside the court. Dispute resolution methods in construction projects can be categorized as non-binding methods such as conciliation, mediation, and dispute review advisors. While binding methods include adjudication, arbitration, expert judgment, and litigation.

The basic premise of the ADR approach, such as arbitration and mediation, has become a timely solution, and it is easier to resolve disputes when compared to litigation settlement in court. Unlike court cases, ADR procedures are exclusive to professionals with significant technical capacity and experience to assist in resolving disputes between project participants. The benefits offered from the ADR procedure over litigation are reduced process costs, the possibility to maintain relations between disputing parties, and greater flexibility in the design of ADR procedures to suit the project better.

In construction practice, there are many construction service disputes that occur largely through many reasons between various parties in the design or construction effort. Construction service disputes originate from two main interrelated sources, namely construction contracts and unexpected events. Construction service disputes can occur from the initial stage to the closing phase of the project. It also occurs when the contractual phase has been agreed, signed, and carried out in the field. Construction service disputes occur when what is stated in the contract does not match what is done in the field. Construction disputes can arise, among others, due to claims that are not served, such as late payments, late completion of work, differences in interpretation of contract documents, technical or managerial incapacity of the parties. Conflicts related to disputes occur because the contractor fails to manage and resolve the problem and where the contractor does not receive payment as a cause of increased disputes. In addition, construction disputes can also occur if service users or service providers apparently do not carry out management tasks properly and may not have sufficient financial support. In short, it can be said that a construction dispute arises because one of the parties has committed an injury (default). Construction disputes are disputes that occur in connection with the implementation of a construction service business between the parties mentioned in a construction contract in the western world called a construction dispute. Construction disputes are disputes that occur between parties to a contract. Construction disputes can also occur due to the failure of the parties to fulfill their obligations in the contract. Therefore, this standard violates the law, and this dispute arises because claims made by one party do not get a good response from the other.

Construction service disputes can occur in several stages, including:

- a. Pre-contract dispute

The dispute occurs before the contracts were made and in the process of bargaining.

b. Contract dispute

The dispute occurs when construction is underway;

c. Post-contractual dispute

The dispute occurs after the building is operated during the construction maintenance process.

The dispute is in the form of a change in the written contract requested (claim), which is submitted by one party to the other party as compensation for the "loss" or incompatibility of the implementation of a construction contract. It can be caused by various types of disputes, and these types of disputes are grouped into 4 types based on objects:

1. Costs: The changes in contract value, unit price, and value of installment payments
2. Time: The change in contract time, activity schedule, and payment schedule
3. Scope of work: The changes in the type of work, volume, quality, and method of implementing construction
4. Combined cost, time and scope of work (services): The combination of changes in costs and time, costs and scope of work, time and scope of work, and combination of changes in costs, time and scope of work

Construction service disputes can have a negative impact on client organizations. The progress of construction work will be slow due to disputes between the contractor and the client, then; cash flow also suffered horribly.

The form of dispute regulated in the Construction Act can be divided into 2:

1. Internal Dispute Settlement

The basis for submitting an application is dominated by default reasons. This is regulated in Law No. 2 Year Article 47 paragraph 1 letter I termination of Construction Work Contracts, containing provisions concerning termination of Construction Work Contracts arising from non-fulfillment of obligations of either party. In the explanation of Article 47 letter g, what is meant by "default" is a condition if one of the parties in a Construction Work Contract or in other words, the achievement or injury of promise is the occurrence of a person or legal subject committing negligence or negligence to fulfill his agreement which can be either one or more than four things in the agreement as follows:

To not do what was promised; and/or

- a. carry out what was promised, but not according to what was promised; and/or

- b. do what was promised, but it was too late; and/or

- c. do something that according to the agreement cannot be done

The default that can be carried out by the service provider or the executor of the work include does not fulfil the work completion requirements based on the scope of work, time, quality, and costs stipulated in the construction agreement. While the default for the service user or project owner is in the form of land preparation, land acquisition where the work takes place, or do not fulfil the payment obligations to the service provider who have completed the work.

The party whose rights are violated can sue the party who made the fault to:

- a. To Fulfil the agreement
- b. To Fulfil the agreement accompanied by compensation
- c. Asking to pay compensation only
- d. Cancel the agreement
- e. Cancel the agreement with compensation

2. External Dispute Settlement

External factors are things that can pose risks in the execution of a job. External causes cannot be controlled by contract doers, including government policies, changes in legislation, political, economic, social, cultural conditions and global influences such as changes in the exchange rate of the rupiah against other foreign currencies.

The cause of legal disputes from other external factors that often occur is force majeure. In Indonesian, it is called force majeure.

The term "forced-state" originates from the term "overmacht" or "force majeure," in relation to an agreement or contract that is not specifically found in the Act but is concluded from several articles in the Civil Code. From the articles of the Civil Code, it is concluded that overmacht is a condition that releases a person or party that has obligations to fulfil based on an agreement, which does not or cannot fulfil its obligations, from the responsibility to provide compensation, costs, and interest, and/or from the responsibility to fulfil these obligations.

The regulation of overmacht, in general, is contained in the general part of book III of the Civil Code as outlined in Articles 1244 and 1245. From these two Articles, it can be concluded that the forced situation is that the debtor is hindered in fulfilling his achievements because of an unexpected situation and cannot be accounted for by him. The debtor freed to reimburse costs, losses, and interest.

Results of Overmacht (Force majeure):

1. The creditors cannot request to fulfill the achievements (on a temporary overmacht until the end of the overmacht).
2. The disappearance of obligation to compensate for the loss
3. The opposing party does not need to ask for termination of the agreement (Article 1266 does not apply, the judge's decision is not necessary)
4. The obligation to fulfill the achievements on the opposing side has been nullified

In Law Number 2 of 2017 Article 47 paragraph 1 letter J. in force majeure, contains provisions regarding events that occur outside the will and ability of the parties that cause harm to one party; Forceful situations include:

- 1) An absolute compulsion that the parties have no chance to carry out their rights and obligations; and
- 2) Relative circumstances that the parties are still possible to carry out their rights and obligations.

Risks caused by forced majeure can be promised by the parties, including through insurance institutions.

6. CONCLUSION

Forms of Construction Services Disputes by the Dispute Board can be seen in various criteria taken from Law No. 2 of 2017 on the stages of making construction service contracts based on the object of the dispute.

REFERENCES

- [1] B. Poerdyatmono, "Alternatif Penyelesaian Sengketa Jasa Konstruksi", *Jurnal Teknik Sipil*, Volume 8 No. 1, Oktober 2007 [2] B. Ozorhon, "Analysis of Construction Innovation Process at Project Level", *Journal of management in engineering*, Vol. 29, No.4, 2013.
- [2] B. Mochtar, "Studi Analisis terhadap FaktorFaktor Penyebab Klaim Sengketa Kontrak dan Metode Penyelesaian Sengketa pada Pelaksanaan Jalan Konstruksi", *Kurva S*, Vol. 5, No. 2, 2017.
- [3] C. S. Dorgan, "ICC's New Dispute Board Rules", *The International Construction Law Review*, Vol. 22, 2005.
- [4] C. K. Lee, T. W. Yin, dan S. O. Cheung, "Selection and use of alternative dispute resolution (ADR) in construction projects—Past and future research." *International Journal of Project Management*, Vol. 34, No. 3, Elsevier, 2016. p. 495.
- [5] D. Agdas dan R. D. Ellis, "Analysis of Construction Dispute Review Boards." *Journal of Legal Affairs and Dispute Resolution in Engineering and Construction*, Vol. 5, No. 3, 2013. p. 122.
- [6] F. Fitriyanti, *Arbitrase Nasional dan Arbitrase Syariah Suatu Kajian Perbandingan*, Laboratorium Fakultas Hukum Universitas Muhammadiyah Yogyakarta, 2013.
- [7] F. Fitriyanti dan W. Widodo, *Efektivitas Penyelesaian Sengketa Jasa Konstruksi Diluar Pengadilan*, Pensil Komunika, Yogyakarta, 2019. *Fédération Internationale Des Ingénieurs-Conseils*, "Conditions of Contract for Construction: For Building and Engineering Works Designed By the Employer. Multilateral Development Bank Harmonised Edition March 2006", FIDIC, Geneva: Switzerland, 2006.
- [8] H. M. Musonda and M. Muya, "Construction Dispute Management and Resolution In Zambia", *Journal of Legal Affairs and Dispute Resolution in Engineering and Construction*, Vol. 3, No. 4, 2011.
- [9] N. Yasin. *Mengenal Klaim Konstruksi dan Penyelesaian Sengketa Konstruksi* Gramedia Pustaka Utama, Jakarta, 2004.
- [10] Omotho & Smith, *Introduction to DB*. Paper presented at DB International Conference and Workshop, DB Foundation and Ministry of Public Works and Housing, Republic of Indonesia, 2007.
- [11] Marques R. C. dan Berg S, "Risk, Contracts, and Private-Sector Participation in Infrastructure", *Journal of Construction Engineering and Management*, Vol. 137, 2011.
- [12] P. J. Setyowati and Y. S. Simamora, "The Dispute Settlement of Governmental Construction with Foreign Business Entities in a Contract of Construction Infrastructure Supply", *Jurnal Dinamika Hukum*, Vol. 18, No. 3, 2018.
- [13] P. Abdurrasyid, *Arbitrase dan Alternatif Penyelesaian Sengketa*, Fikahati Aneska, Jakarta, 2002.
- [14] PU-net Kementerian Pekerjaan Umum dan Perumahan Rakyat, Kementerian PUPR Dorong Penyelesaian Sengketa Konstruksi Melalui Dewan Sengketa, www.pu.go.id diakses pada tanggal 21 September 2019 jam 12.15
- [15] R. S. S. Soemadipradja, *Penjelasan Hukum Tentang Keadaan Memaksa*, (Jakarta: Nasional Legal Reform Program), 2010.
- [16] R. J. Gebken dan G. E. Gibson, "Quantification of Costs for Dispute Resolution Procedures in the Construction Industry" *Journal of professional issues in engineering education and practice*, Vol. 132, No. 3, 2006. p. 266.
- [17] S. O. duffy and H. Y. Pang, "Conceptualising Construction Disputes", *Construction Dispute Research*, Springer, 2014.

- [18] S. Hardjomuljadi, *Alternatif Penyelesaian Sengketa Konstruksi di Indonesia*, Logoz Publishing, Bandung, 2016.
- [19] S. Hardjomuljadi, "Dispute Board as the Alternative Dispute Resolution for Construction in Indonesia Based on FIDIC Conditions of Contract and the Law No 2 Year 2017", *Jurnal Teknologi*, 2017.
- [20] K. M. Harmon, "Case Study as to the Effectiveness of Dispute Review Boards on the Central Artery/Tunnel Project", *Journal of Legal Affairs and Dispute Resolution in Engineering and Construction*, Vol. 1, No. 1, 2009.
- [21] P. Patrik, *Hukum Perdata I (Asas-asas Hukum Perikatan)*, (Semarang: Jurusan Hukum Perdata Fakultas Hukum Universitas Diponegoro, 1988),
- [22] V. Mahnken, 2018, "On Construction Adjudication, the ICC Dispute Board Rules, and the Dispute Board Provisions of the 2017 FIDIC Conditions of Contracts." *McGill Journal of Dispute Resolution*, Vol. 5, No. 3
- [23] X. Song, et al, "Determining the optimal premium for ADR implementation insurance in construction dispute resolution", *Journal of Management in Engineering*, Vol. 30, No. 4, 2014. p. 1.
- [24] Z. Zakaria, S. Ismail, dan A. M. Yusof, "Cause and Impact of Dispute and Delay the Closing of Final Account in Malaysia Construction Industry", *Journal of Southeast Asian Research*, Vol. 2012