



UMGESHC 2020

Universitas Muhammadiyah Gresik
Engineering, Social Science, and Health
International Conference

ABSTRACT BOOK

“ ENHANCING HUMAN RESOURCES PRODUCTIVITY
THROUGH ENGINEERING, SOCIAL SCIENCE, AND HEALTH
DURING COVID-19 PANDEMIC ”

DECEMBER 9 - 10, 2020 || GRESIK - INDONESIA

Compiled by:

NUR FAUZIYAH
SUKARIS
ANDI RAHMAD RAHIM
DODI JAYA WARDANA

PAULINA
ELLY ISMIYAH
M. ZAINUDDIN FATHONI
INDRA GITA ANUGRAH

LEMBAGA PENELITIAN DAN PENGABDIAN KEPADA MASYARAKAT
UNIVERSITAS MUHAMMADIYAH GRESIK

UMGESHIC 2020 ABSTRACT BOOK
*Enhancing Human Resources Productivity through
Engineering, Social, Science, and Health during
Covid 19 Pandemic*

Penulis:

Nur Fauziah
Sukaris
Andi Rahmad Rahim
Dodi Jaya Wardana
Paulina
Elly Ismiyah
M. Zainuddin Fathoni
Indra Gita Anugrah

**Lembaga Penelitian dan Pengabdian Kepada
Masyarakat
Universitas Muhammadiyah Gresik**

UMGESHIC 2020 ABSTRACT BOOK

Enhancing Human Resources Productivity through Engineering, Social, Science, and Health during Covid 19 Pandemic

Penulis:

Nur Fauziah
Sukaris
Andi Rahmad Rahim
Dodi Jaya Wardana
Paulina
Eli Ismiyah
Zainuddin Fathoni

ISBN: 978-623-96158-0-2

Editor: Nur Fauziah

Dodi Jaya Wardana

Desain Sampul dan Tata Letak

Hariyono Hanafi

Penerbit:

Lembaga Penelitian dan Pengabdian Kepada Masyarakat Universitas Muhammadiyah Gresik

Redaksi:

Jalan Sumatera 101 GKB Gresik Randuagung 61121

Tel +62313951414

Fax +62313952585

Email lppm@umg.ac.id

Distributor tunggal:

UMGESHIC

Jalan Sumatera 101 GKB Gresik Randuagung 61121

Tel +62313951414

Fax +62313952585

Email: umgeshic@umg.ac.id

Cetakan Pertama, Februari 2021

Hak cipta dilindungi undang-undang

Dilarang memperbanyak karya tulis ini dalam bentuk dan dengan Cara apapun tanpa ijin tertulis dari penerbit

Kata Pengantar

Assalamualaikum Warahmatulla Hiwabarokatuh

Pertama-tama, marilah kita bersyukur kepada Allah SWT, Yang Maha Kuasa, atas berkah-Nya, karena membimbing kita ke jalan yang benar, dan karena telah memberikan kita semua sarana dan kesempatan bersama di sini untuk menghadiri acara yang penuh makna ini.

Atas Nama Universitas Muhammadiyah Gresik, kami sangat tersanjung dan senang menyambut Bapak / Ibu di *International Conference on Engineering, Social, Science and Health, University of Muhammadiyah Gresik (UMGESHIC) 2020*. Kami juga ingin menyampaikan terima kasih kepada semua Keynote speaker yang telah menerima undangan kami untuk menjadi keynote speaker pada konferensi ini. Apresiasi juga kami sampaikan dan terima kasih kepada penyelenggara konferensi, co-host, semua reviewer, serta penulis atas kontribusinya dalam menyukseskan acara UMGESHIC 2020. Kami juga sangat mengapresiasi penerbitan kami, partner, IOP Publishing, atas dukungan kolaboratif mereka dalam menerbitkan prosiding konferensi.

Tujuan dari UMGESHIC 2020 adalah untuk memberikan beberapa peluang penelitian yang nantinya dapat diimplementasikan dan dikembangkan dalam kehidupan nyata, mengingat tantangan saat ini dalam Revolusi Industri 4.0, khususnya dalam Pengembangan Sumber Daya Manusia serta Teknologi Informasi. Melalui konferensi Internasional ini, kami ingin terlibat dengan Anda semua dalam dialog terbuka dan konstruktif tentang berbagai topik di bidang *Engineering, Social, Science and Health*. Apalagi wabah pandemi masih menjadi masalah yang menakutkan bagi hampir semua negara dan mempengaruhi semua aspek kehidupan manusia. Oleh karena itu, konferensi ini diharapkan dapat memberikan solusi atas permasalahan yang muncul.

Hadirin sekalian, akhirnya izinkan saya mengucapkan semoga Konferensi yang bermanfaat dan menyenangkan bagi Anda. Semoga acara ini sukses dan membawa kita lebih banyak ilmu dan manfaat kedepannya.

Gresik, Februari 2021

Rektor Universitas Muhammadiyah Gresik.

DAFTAR ISI

HALAMAN JUDUL	i
KATA PENGANTAR	iii
DAFTAR ISI	iv
Law.....	1
Islamic Study	16
Business Management	26
Accounting.....	46
Entrepreneurship.....	54
Biotechnology	60
Nursing and Midwifery	63
Pharmaceutical	99
Physiotherapy	100
Mathematics	101
Education.....	113
Chemical Engineering.....	186
Informatics Engineering	193
Civil Engineering	230
Mechanical Engineering	235
Electrical Engineering.....	240
Industrial Engineering.....	242
Pschology	259
Agrotechnology	260
Fishery.....	273
Social Science and Humaniora	278

INSTRUMENTS OF DEMOCRACY IN LAW-MAKING IN INDONESIA

DJ Wardana¹, Sukardi², R Salman³

¹Universitas Muhammadiyah Gresik, East Java, Indonesia

^{1,2,3}Universitas Arilangga Surabaya, East Java, Indonesia

ABSTRACT

Law is basis for the implementation of all policies made by the government. The legal policy as outlined in the law, becomes a means of social change, which contains policies to be achieved by the government, to direct people to accept the new values. The purpose of writing this paper is to examine the instruments of democracy in law-making, especially Indonesian law. This research uses statute and conceptual approach to study and analyze the conceptual framework that is suitable with this research, namely the instrument of democracy in law-making. Finding of the research is principle of democracy in law-making in Indonesia can be identified into three fundamental aspect: guarantee of information disclosure, public participation and public-rights mechanisms. Information Disclosure can be in the form of: (a) Guaranteed information disclosure, (b) Accountability, and (c) Consensus. Community participation is carried out through: (a) Public hearing, (b) Work visit, (c) Socialization, and (d) Seminars, workshops and discussions. Public-right mechanism can be: (a) judicial enforcement in the form of judicial review and democratic-mechanism in the form of demonstration. Most of the instruments of democracy in law-making in Indonesia is community-participation based.

Keywords: Law; Democracy; Instrument.

Instruments of democracy in law-making in Indonesia

DJ Wardana¹, Sukardi², R Salman³

¹Universitas Muhammadiyah Gresik, East Java, Indonesia

^{1,2,3}Universitas Airlangga Surabaya, East Java, Indonesia

Corresponding author: dodijayawardana@umg.ac.id

Abstract. Law is basis for the implementation of all policies made by the government. The legal policy as outlined in the law, becomes a means of social change, which contains policies to be achieved by the government, to direct people to accept the new values. The purpose of writing this paper is to examine the instruments of democracy in law-making, especially Indonesian law. This research uses statute and conceptual approach to study and analyze the conceptual framework that is suitable with this research, namely the instrument of democracy in law-making. Finding of the research is principle of democracy in law-making in Indonesia can be identified into three fundamental aspect: guarantee of information disclosure, public participation and public-rights mechanisms. Information Disclosure can be in the form of: (a) Guaranteed information disclosure, (b) Accountability, and (c) Consensus. Community participation is carried out through: (a) Public hearing, (b) Work visit, (c) Socialization, and (d) Seminars, workshops and discussions. Public-right mechanism can be: (a) judicial enforcement in the form of judicial review and democratic-mechanism in the form of demonstration. Most of the instruments of democracy in law-making in Indonesia is community-participation based.

Keywords: Law; Democracy; Instrument.

1. Introduction

Law is basis for the implementation of all policies made by the government. The legal policy as outlined in the law, becomes a means of social change, which contains policies to be achieved by the government, to direct people to accept the new values. [1] Measures toward the formation of a higher quality law, part of an effort to support legal reform, have been realized through a national legislation program. Such improvement efforts involve law-making process, as well as the regulated substance. Such a move is expected to provide assurance that the established legislation is able to accommodate rapid needs in the implementation of development.

The quality of legislation products is largely determined by the process and mechanism of the preparation and discussion. In the process, the more intense and widespread community participation will result in improved and democratic and accommodative products of legislation to the interests of society. Therefore, it is necessary to have a standard level of public participation, both in terms of intensity, scope, media, and instruments of participation that are regulated comprehensively and in detail in the provisions of legislation on law-making.

There is often bill approved by the People Representative Council to become law, then passed and enacted by the President, but is immediately criticized sharply that the legislation needs to be revised. For example, to illustrate this, Law Number. 23 of 1997 on the Management of the Environment, immediately received a "verdict" of revision, immediately after it was enacted. Other issues can also be revealed, such as when the implementation of Law Number 22 of 1999. At the beginning of the enactment of this law immediately reap criticism, because the emergence of juridical problems in its application. Example of the latest problem is Law Number 9 Year 2009 on Education Legal Entity and Act of Social Organization, namely Law Number 17 of 2013 on Social Organization. At the beginning of the enactment of this law also immediately reap criticism, because the emergence of juridical problems in its application.

For this reason, it is democracy principle in law making is a key aspect to have good legislation.. The study focused on the issue of what form of democratic instrument in law making? This study is a normative legal study conducted through literature study or library research, using conceptual approach and statute approach. Conceptual approach used to find meaning and content of democracy, while statute approach used to find how rules of on law-making process based on Indonesian legal system.

2. Discussion

2.1. Guarantees of Information Disclosure

Involvement and participation in the legislative process requires access and opportunities that are legally formalized to the public to obtain information about everything that happens within the parliament, especially with regard to law-making activities. Availability and access to information and community involvement in the legislation process are two interrelated issues. Decision-making in parliament is basically formally conducted in trials, therefore access to attend sessions (meetings) is an important key to community participation. This means that public hearings are an important part of the effort to create an accountable and transparent parliament. In addition, access to court proceedings, trial treaties and various public information forms the basis for broader parliamentary transparency. Thus, the guarantee of public information disclosure, the granting of access to the court and the willingness to pay attention to public inputs become the minimal preconditions for the involvement of the people in the process of legislation.

The constitution of the Republic Indonesia Article 28F provides citizens with constitutional guarantees for public information. Mentioned in the constitution that: each person shall have the right to communicate and obtain information to develop his or her personal and social environment. They also have the right to search, obtain, possess, and store information using any available channel types.

Human rights guarantee in the constitution of the Republic of Indonesia is a mandate to the Government and the House of Representatives to elaborate it further in various implementing legislation in order to become operative. Therefore, all information produced and about the administration of the government belongs to the people as a mandate. It is therefore appropriate that information about activities funded with public funds be public information as well. This is the basis for the principle that public information is open and accessible.

2.2. Accountability

The issue of accountability in law making an inseparable requirement to create Good Governance through the product of the law in the context of the administration of the State.

With regard to this accountability, Starling provides the definition of accountability is as follows: A good synonym for the term accountability is answerability. An organization must be answerable to someone outside itself. When things go wrong, someone must be held responsible. Unfortunately, a frequently heard charge is that government is faceless and that, consequently, affixing blame is difficult. [2]

From the above formulation, starling asserts that accountability is a willingness to answer public questions. Public questions in the context of accountability imply a liability to various policies and public services. Thus, this accountability is a Condition Sine Quanon for an official or an office environment in a democratic State. For, in essence, the power inherent in a position or an office environment in a democratic country is from the people, by the people, to the people and run with the people.

2.3. Consensus

The consensus should involve the community in the process of preparing and discussing the draft law to be drafted, so that the desired objectives can be achieved. Furthermore, A. Hamid S. Attamimi also said that, in Indonesia the consensus can be realized with: [3] good planning, clear, and open, known to the people about the consequences that will arise and the background and goals to be achieved. It can also be done by spreading the draft laws to the public before its formation. Of course, in addition, if the legislation in question is a law, its deliberations in the House of Representatives can be done by involving as many people as possible through institutions with opinions that we have long had.

2.4. Freedom Of Expression

Discussion on freedom of expression, related to public freedom in participating in the process of formulating legislation. The way that can be done in participating is poured in the form of freedom of opinion is through 2 (two) ways that is by formal and formal Numbern. Formal means official means in other words there are certain rules that must be obeyed and not free, whereas formal Numbern is not official generally though there are no rules that are too intriguing, but still there are limits. Then the community can participate in a formal way through: the delivery of alternative draft laws. While the formal Numbern way is: a). Demonstration. (b) Proposals and inputs through print media; and (c) Proposals and inputs through electronic media. Formal and informal means undertaken by the community to participate above in the process of formulation of the legislation will be described further below:

2.4.1. Formal Method

Submission of Alternative Bill

The participation of the community in the form of submission of the Alternative Bill can be made by the community by drafting the alternative provision at the same time when bill discussed in the legislature has not been or is not even aspirational to the interests of the wider community. The drafting of the alternative bill made in accordance with procedure and format as stipulated in the Law of Number 12 Year 2011 on the Establishment of Laws and Regulations. Submission of this alternative Bill should be made in the early stages of the discussion of the bill in the legislative body, i.e., simultaneously with the submission of bill to the House of Representatives by both the Government and the Parliament itself. If the submission of the new alternative law is proposed mid or even at the end of the discussion of a bill, then the objective of the proposed alternative Bill will not be effective in influencing law-making process.

2.4.2. Informal Method

Public participation by informal means can be done through: a). Demonstration. (b) Proposals and inputs through printed media; and (c) Proposals and inputs through electronic media.

Demonstration

Community participation in the form of demonstration can be done by the community in order to support, reject or suppress the material being discussed in the process of forming the law. However, the influence of this demonstration will be more successful in influencing the legislature if it is carried out by the people directly concerned, with a large and continuous number. This demonstration is an expression of the individual's freedom of citizens for their interests which will be regulated in a law. So, this demonstration can not only be regarded as a wind and in the process of forming the law.

Proposals and Inputs through Printed Media

Public participation in the form of suggestions and input through print media can be done by the public by making an opinion on a problem being discussed in the legislative body. This public opinion can be articles, press conferences, interviews, statements, or news headlines from newspapers and magazines. Public participation through the print media is widely done by the community, because the way is relatively practical when compared with other forms of community participation. This means that the perpetrators of community participation will not lose much time to do so.

However, the form of public participation through this print media, has a weak side of the opinion submitted is not necessarily up to the hands of authorities to discuss a Draft Law. Therefore, in addition to submit to the print media should be sent to the House of Representatives either through the post or email so directly accepted by the completeness of the House of Representatives which was discussing a Draft Law.

Proposals and Inputs through Electronic Media

Public participation in the form of input through electronic media can be done by the community by creating a dialogue by presenting competent resource persons to a problem being discussed in the legislature. Dialogue through electronic media has a wide range and can encourage people to participate in discussing issues that concern the wider community. Therefore, public participation in the form of electronic media needs to be encouraged in the process of formulating the law so that it will awaken the public about the rights and obligations that will be regulated in the law.

2.5. Public Participation

Community participation is defined as the participation of the community, either individually or in groups, actively in the determination of public policy or legislation. As a concept developed in the modern political system, participation is a space for people to negotiate in the process of policy formulation, especially those that directly impact people's lives. Saifudin states that: Participation is a growing system in modern political systems. [4] The provision of public space or the presence of community participation is an absolute demand for democratization. Saldi Isra in his book entitled the shifting function of legislation states that, community participation is defined as the participation of the community, both individually and in groups, actively in the determination of public policy or legislation. [5]

Community involvement in the drafting of the Law covered under the meaning of transparency and accountability is that the decision-making process is conducted openly, where the argument of consent or claims on a plan of the Act is conducted in consultation and with the public's knowledge. Furthermore, the existence of community participation has led to a prolonged debate between two opposing and pro-democratic groups with community participation. [6]

In contrast to elite democracy, proponents of participatory theory of democracy, judging importance in terms of the existence of community participation, suggesting that: The citizens both individually and in groups, are not merely consumer of satisfaction, but require opportunities and encouragement for self-expression and development. According to the followers of the theory of participatory democracy, it is assumed that citizens of each other are always in a state of conflict of interest, but instead view that the essence of the human personality is complementary in collective life so that each other able to harmonize individual interests with the common interest (sosiall interest) through acceptable means. According to followers of the democratic theory of participation, the essence of democracy is to ensure that decisions are made by the government by including citizens who may be affected by those decisions. Therefore, the notion of democracy is to encourage participation in making decisions that affect their lives. Thus, this theory not only wants to bring about democratic governance, but also democratic societies.

Furthermore, according to the theory put forward by Sherry R. Arnstein is the theory of "Ladder Arnstein" which is characteristic of public participation (democracy), in the ladder is loaded with meaning. There are eight steps, symbolizing the eight levels of public participation. Arnstein named him, The Ladder of Citizen Participation or popular with The Arnstein's Ladder.

Arnstein classifies the eight steps into three parts in the form of a ladder of participation in that order:

1	Citizen Control	Degree of citizen power
2	Delegated Power	
3	Partnership	
4	Placation	Degree of tokenism
5	Consultation	
6	Informing	
7	Therapy	Number participation
8	Manipulating	

His lowest stairs represent non-participation conditions, including: (1) manipulation and (2) therapy. Then followed by stairs (3) informing, (4) consultation, and (5) placation, where the three ladders are described as tokenism levels. Tokenism can be interpreted as a conscious policy, in the form of superficial efforts or a symbolic action in the achievement of a goal. So simply abort a mere obligation and not a genuine effort to engage society in a meaningful way. The next ladder is (6) partnership, (7) delegated power, and (8) citizen control. The last three ladders illustrate a change in the balance of power that Arnstein considered a real form of community participation.

2.6. Public-Rights Mechanism

The discussion on the public-right mechanism is in relation to the form or steps that can be taken by the public against the objection or dissatisfaction of the public to the presence of a law made by the

government together with the People's Legislative Assembly and enacted by the government in the State Gazette. The objection mechanism that can be done by the community is by: (a) a protest against the presence of a new law; and (b) demands for judicial review of the law.

2.6.1. *Demonstration Against the Presence of the New Law*

The existence of a new law can be addressed by a variety of people, because it is very possible with the new law that is not solve the problem, but it creates new social problems in society. That attitude can be either support or rejection of the birth of a new law embodied by the demonstration. Unfortunately, however, the protests against the new law were aimed at a new law rather than supporting the emergence of new legislation. In fact, protests can also be made against the existence of new laws in accordance with the wishes of the community. Therefore, this demonstration is a form of public participation in law-making process, especially protests that refuse because it will encourage refinement or replacement with a better law.

2.6.2. *Judicial Review Mechanism*

Law that has promulgated by the legislature and has been ratified by the President and contained in the gazette of the state has binding and valid power applicable in the community. For people who have not or are not satisfied with the birth of a law can make a petition for judicial review of the law.

The existence of a judicial review of the law is intended in order to maintain the constitutional standing of the abuse of power from the legislative organs. For, the law is made by the legislative body which is a political institution and therefore inevitably can be loaded with political interests in it.

Thus, the demand for judicial review of the law is the right of the community to be guaranteed in realizing the participation of the community in the process of forming the law. It is necessary to have institutions that are consistently given the authority to conduct material judicial review of legislation products that are perceived to be detrimental to society, and the idea for this material test basically existed since the formulation of the Constitution of the Republic of Indonesia.

Along with the opening of the tap of democracy and the increasing of public participation in the reform era in regulating the constitution of constitutional life, the petition for judicial review or the judicial review of the law is allegedly contradictory to the Constitution of the Republic of Indonesia's Republic of Indonesia Constitution Court and the examination of laws and regulations under the law, the law is allegedly contrary to the law then its testing by the Supreme Court experienced a significant increase.

3. Conclusion

Based on the results of research and analysis conducted through the assessment as described in the previous chapters, to the following conclusions: that the form of instruments (tools) of democracy in the formation of legislation that can be realized/in the form of guarantee of information disclosure, public participation and mechanism of objections. Where Information Disclosure can be: (a) Information disclosure guarantee, (b) Accountability, (c) Consensus. Public-right mechanism can be: (a) judicial enforcement in the form of judicial review and democratic-mechanism in the form of demonstration. Most of the instruments of democracy in law-making employed in Indonesian context is the community participation.

References

- [1] S. S. Rangkuti, *Hukum Lingkungan Dan Kebijakan Lingkungan Nasional*. Surabaya: Airlangga University Press, 2017.
- [2] I. G. P. dan S. N. Astawa, *Dinamika Hukum Dan Ilmu Perundang-Undangan Di Indonesia*. Bandung: PT ALUMNI, 2019.
- [3] YULIANDRI, *Asas-Asas Pembentukan Peraturan Perundang-Undangan Yang Baik, Gagasan Pembentukan Undang-Undang Berkelanjutan*. Jakarta: PT Rajawali Pers, 2015.
- [4] Saifudin, *Partisipasi Publik Dalam Pembentukan Peraturan Perundang-Undangan*. Yogyakarta: FH UII PRESS, 2018.
- [5] Saldi Isra, *Pergeseran Fungsi Legislasi*. Jakarta: PT Rajawali Pers, 2017.
- [6] J. Asshiddiqie, *Perihal Undang-Undang*. Jakarta: PT Raja Grafindo Persada, 2016.

