Participation of Society In Decision-Making By Government In Industrial Revolution 4.0

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Abstract. The government environment policy is important because as a guide to plan the use of environment and society as a bundle of nations interest due to industrial revolution. The industrial revolution is a challenge for government to maximize this revolution to enhance the management of environment in order to fulfill the human rights environment without ignoring the capacity and reuse of environment. The method of this article is normative approach by analyzing the related regulations and comparative approach. The issue is how the government make policy in coming industrial revolution. The neglected of society needs will cause damage of environment. Government has to move to new paradigm of decision-making process, by using the participation of society. Theory of development of law which had been introduced in Indonesia for some years ago was inspired by Roscoe Pound and Eugene Erlich's theory, which might be used to support the government. The multi-level governance which develops in European Union gives influence in paradigm shift of government. The integration between theory of development of law and multi-level governance is important to use by government to embody the welfare state.

Keywords: **Government Environment Policy; Participation Of Society.**

1 Introduction

The development of industries gives a great impact on our lives, on the other side, the shifting paradigm of norms, values, and behavior contributes to the damages of environment. We can not set aside these changes, on the contrary, we have to solve, improve, comprise and make it become benefit for the environment and our sustainable life.

The coming of industrial revolutions 4.0 is as fast as can be, but the regulations usually are left behind, and this is our problem. Government should develop a new approach to face these changes, in the frame to protect the environment. Industry revolution should be used for the goodness of the environment and human beings, not to demolish the environment.

Fast-changing of industrial revolution from the 1.0 until 4.0, should give benefit and this is the government's role to implement the welfare state. Using the industrial revolution 4.0, government's regulation has to be focus on environment sustainability and society.

The benefit of industrial revolution 4.0 should be used in a proper way so it will be useful for society and environment. To elaborate on the changes and needs there should be regulations which on purposes. The development of industrial revolution 4.0 actually is highly needed for the manufacturer, industrial process also the data transfer which can be done in second. This revolution has to give benefits to the society and environment, not only to ruin.

The legislation process has an important role in compile the regulations, but in the modern era which requires the change and dynamic process is significant to attain the aims of national program. Government has to improve the new approach in legislation process, without ignoring the important procedures, in order to actualize the aims.

The society has a norm, values which lived in heredity and bind the environment, with the local wisdom to preserve them. The values had been proven for decade to save the environment. These essentials points should encompass the rules, as an acknowledgment to society, and to put it in positive regulations.

New approach in decision-making process which puts the participation of society environment interest as the first, not only puts the industry interest at the first. This balance position might be difficult to attain, and there should be a political will from government to make effort.

Government has to shift from the old paradigm of decision-making to new paradigm, to get the welfare state by using the industrial revolution 4.0, and based on society and environment interests.

The issue, *first*, is how the governance decision-making process to harmonize the coming of industrial revolution 4.0, *second*, how is the government's policy based on environment sustainability and social changes?

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2 Method

To analyze and answer the above issues., it is important to use the normative approach. *First*, read and then analyze the related regulations. *Second*, from the analyze related regulations, it is important to know the principles, norms which are using to solve the issues.

3 Discussion

3.1 The Decision-making Process in Government's Policy

The environmental rule of law had been known for some decades, it governs relations between human and environment to support the human life as mankind in their society, and this evokes environmental governance. Between environmental rule of law and environmental governance, there is an important relationship, to achieve the goals to fulfilled the human environment and implement the principles as stated in Stockholm Declaration in 1972. The environmental rule of law focuses on obedience of the society to the environment regulations and environmental governance conceive the making of decision and implementation, also improves the quality of decision of environment. In the report "Environmental Rule of Law" by UNEP in 2019, mentioned that institutions, civil society, private sector blended to achieve the goals, and to increase the compliance of the law and nurtured the behavior to respect the environment.

The environment governance starts from the institutions committed to making a decision that put the importance and renewable environment, sustainable development as a prior to implementing. Magda Lovei and Charles Weiss stated that *"the administrative and institutional framework is an inherent part of the environmental management system. It facilitates and support the environmental policy-making process and ensures the implementation and enforcement of policies. The main pillars of environmental administration are government agencies appointed and authorized by elected officials to carry out these tasks. The administrative framework also entails a web of formal and informal organizations with established rules, communicational and command pattern, and insitutional linkages, such as decision –making, distribution of authority, interactions, and patterns of communications with the other organizations, individuals, and groups"* [1]. The governance has an important role to make decision considering principles of good governance as basic principles to make a policy, and principles of human-environment to fulfilled the human rights environment, both are important principles to achieve the goals from institutions core.

Act No 32 Year 2009 of Protection and Management of Environment stated that this act focuses on the strengthening principles of protection and management of environment based on principles of good governance, since every process of formulation, implement, precaution and damage, access to justice should be

integrated with accountable, justice, transparency, impartiality.

As stated by Mahfud M.D., characteristic of responsive government policy is participation of society in decision-making, based on society's needs, and the substantive is limit, to avoid the multi interpretation and cause the lack of law enforcement. Arief Hidayat said that it's time to develop the governance based on environment, he promotes ecocracy, besides democracy, nomocracy, and theocracy [2]. The political changes in Indonesia have brought different approach to government practices, as showed with new regulations. The government policy in environment had been changed, but it should be getting more access to participation of society in decision-making. There is no doubt, this will get tension in legislative and executive, to accept the changes and shifting paradigm of decision-making.

In decision-making process, the governance should obey the guidelines based on law and principles of good governance in Article 10 para 1 of Act No 30 Year 2014 of Governance Administration, i.e legal certainty, expediency, impartiality, accuracy, abuse of power, openness, public interest, good public service, other principles could be used as far as those had been used by the Judge in the legally binding verdict. In the Act No 32 Year 2009 of Protection and Management of Environment has 14 (fourteen) principles which have to be followed in decision-making process, i.e state responsibility, harmony, and balance, integration, advantage, precautionary, justice, ecoregion, biodiversity, polluter pays, participation, local wisdom, good governance, autonomy.

As comparison study, in New Zealand, put the formal legal recognition and right to act on its own, the constitutional provision has en eco-centric focus and giving environmental legally enforceable rights, henceforth also made in other jurisdiction, i.e Ecuador recognize the rights of nature and Bolivia put in Law of the Rights of Mother Earth [3]. In New Zealand puts the recognition with Maori and their culture and tradition to involve in making the decision for their environment.

It is important to put participation of the society, as stated by Pieraccini, when designing participatory procedures in environmental decision making because to avoid the negative substantive effects of thin proceduralization of the perception of environmental issues [4]. The development of governance paradigm is important, and the participation of society to make decision-making has to consider, if the society's interest is accentuated. The society can give more information on how to treat the environment wisely, even using modern technology. Their habits always based on local wisdom and their dependency to environment.

As comparison study, public participation in China has increased, become more institutionalized, as a result of bottom-up pressure brought by citizen protest; but it still lower than democratic countries because of constraints of China political system. Furthermore, this as an impact of Multi-Level Governance (MLG) in China emerged, to overcome the effects of environmental policy-making. The governance

introduced legislation in public participation in environmental decision-making, further it is known as open government information legislation [5]. This approach based on the case that if the regulation lack of public participation had been led to environment protest and damage.

Multi-Level Governance (MLG) as a phenomenon developed in Europe, arouse from the common issues, demands have raises mix action across multi-level governance, various stakeholders, and citizens. Follows by international and global influences give more tension and opportunity to develop mutual collaboration. In China, the MLG has been reshaping the public policy administration which relies solely on hierarchy, publicness, and sovereignty [6]. As a new phenomenon, the MLG also leaks to governance in the world, while the implementation will appropriate with philosophy, local wisdom, authority from each governance. The arise idea of participation of society should be considered by the governance in decision-making.

We can develop hybrid form between regulations and rights, both can involve in rule-making after decision-making process, monitoring and enforcement[7]. The variety of hybrid is depends on the culture, politics, economy and other social matters for each country, moreover, this is a socio-legal approach that might be useful in decision-making. Another socio-legal approach might be possible to introduce.

3.2 Environment Governance in Industrial Revolution

United Nations Environment Programme (UNEP) is one of the UN body which concern about the environment and its matters. In their course, there is statement about what is international environmental governance is a continuing process of decision-making in international and includes institutions and organizations as well as agreements and policy. The principal actors are states and international organizations, besides are the stakeholder such as women, children, indigenous people, NGO's, local authorities, business and industry, etc. In the national level, the meaning of environmental governance can be understood as process of decision-making by the authorized with participation from the NGO's, business and industries and other stakeholders which has important role and benefit to the continues environment.

In the Industrial Revolution 4.0, the government takes a great role to make regulations and decision-making considering the recycle, sustainable development, energy conservations which become important from day by day. Developing new approach as already made in New Zealand, it is better to invite the indigenous society, the industries and NGO's to discuss and prepare the friendly – eco-regulation. The regulations are important since regulate and determine the kind of industry to operate and maintain the environment.

There are some changes happen in industrial revolution, the society will follow and appropriate their

norms, ethic and value of life towards this [8] . On the other side, the industrial actors contributes to the changes by introducing the new products and results. The regulations also have to develop a new approach considering the industrial revolutions and the changes, and the judicial power as a part of law enforcement to settle the environment case. The policy has to make clear and strict statements which include the industry's responsibility to recycle the environment. This will impact the industries's policy considering the economic value and other industrial factors include the operational, wages, allowances, information technologies and other supported factors. Referring to the industrial revolution 4.0 there are some important points relates to the environment recycle. *First*, the industry will use information technology in every step of their product. Thus, the industry has to maximize the technology to manage waste of their product appropriately with the environment. It will take sometimes for research and development to prepare, implement the result in the society. *Second*, the government has to make regulations, stating that the industry must use the information technology to manage waste properly, and obey the rules. Starting point to use the new approach in decision-making as environmental governance, the participation of society or stakeholder should get protection and guarantee as the same as the environment defender. *Third*, law enforcement is important, to protect the environment from the damage and society. The judicial control to administrative action is a stimulating force in public administration to improve and increase the confidence of citizens, besides the most important functions are preventive and repressive control [9]. The government is in important position to control the industrial, for the well being and happiness of the people.

The reconstruction of theory of development law is important, to re-organize the theory of development law which had been used in the New Order era, in order to implement in reformation era in making the environment legal policy and natural resources. Refer to this matter, theory of development law introduced by Mochtar Kusumaatmadja, historically was modified from Roscoe Pound's theory, and has been appropriate to Indonesia's condition and started from the law-making, besides the jurisprudence [10]. To face the industrial revolution 4.0, theory of development law has to reconceptualized by considering the changes in society.

Before decision-making process, the stage of planning also important. Planning has to put the government, society, industrial sector into one round table, to engage decision-making process of various subject, include the environment [11] . Good planning is one key to arrange the environment and industrial revolution 4.0 to increase the quality of life.

Besides planning, the government may be can develop a collaborative learning process, that they can share and gather informations, ideas, policies and this enables or constraint collaborative such as social, technologies, structure and social dynamic is the most important in foster the collaborative [12]. This is another socio-legal approach to decision-making process.

The urgency of planning, hybrid form between regulations and government, collaborative learning process, is to make regulations of the use of industrial revolution 4.0 for the prosperity. The development of industrial revolution 4.0 ahead of things that people realize, that is why the government has to find a way to make it useful. The decision-making process shown in Figure 1.

Fig. 1. The Decision Making Process

Government has to make the plan of use of environment, and encourage the public participation to make the regulations. In Eugene Ehrlich's theory, living law which is relevant to the people's volition. It means that the law made by people's participatory will have a good impact since it is based on their needs. Roscoe Pound uses the theory of law as a tool of social engineering, in the frame of the government decision-making is to engineer the people to be more aware while using the industrial revolution 4.0, for reuse, recycle, conservation environment and energy.

4 Conclusion

Government has to shift the paradigm of decision-making by putting the participation of society, also as implementation the theory of development of law. In the industrial revolution 4.0, the government policy is important to control the industrial revolution 4.0, unless it can harm the reuse, recycle, conservation of environment. The industrial revolution 4.0 should be used to improve the quality of environment and society. The integration between theory of development of law and multi-level governance is important to use by government to embody the welfare state.

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