The Influence Of Central Government's Role, People And Company's Participation In Restraining Land And Forest Fires In Indonesia In The Perspective Of Good Governance

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ABSTRACT

This paper is aimed at investigating the forest fire and its correlation with prevention and negotiation strategy based on empirical problems raised by this study. This study used a quantitative approach by adopting survey methodology. The survey was undertaken in areas of Indonesia that have a high level of vulnerability to forest fires. The study population was taken from 105 villages in those six major provinces experiencing forest fires. Sample size precision was determined by using Slovin's formula with a precision of 10 percent and, thus, a sample size of 52 was obtained. The inferential statistic method utilized in this research is Partial Least Square (PLS). The implementation of public policy (in this case, forest fire management policy) is influenced by government's role and the participitation (in this case, company), as well as the effect of good governance. Therefore, based on the empirical problems related to theoretical problems and normative problems, this study raises the influence of the role of central and local government on the implementation of forest fire prevention policy in Indonesia, which is moderated by good governance variables. This study finds that the variable of forest fire prevention governance is a pure moderator of the influence of the role of the central and local governments on the implementation of forest fire prevention policies in Indonesia, it will not impact the effectiveness of forest fire prevention, which is reflected in the aspects of prevention and early warning, reward and punishment, the improvement and management of ecosystems by reviewing courts, law enforcement and national and regional synergy.

INTRODUCTION

One of the routine disruptions to the existence of forests that still occurs today is forest and land fires, especially, in every dry season. The forest and land fires have a negative impact on ecological aspects that includes a reduction in biodiversity, the decline in the economic values of forests and land productivity, micro and global climate change. Moreover, the smoke produced also has negative impacts on socio-economic aspects; public health (especially in respiratory disorders); disruption of land, water, air transportation; and even disrupts the political relations between ASEAN countries, especially, the countries that are close to Indonesia like Singapore, Malasyia, and Brunei Darussalam. The forest and land fires has given big negative impact to local people, neighboring countries, as well as the threat to the sustainability of forest biodiversity (Begotti & Peres,, 2020; Arroyo-Rodríguez et al., 2020; Elbaar & Meilantina, 2020; Narita et al., 2020, Alamgir et al., 2020). The loss received by the local people is a health threat since the forest fire smoke contains various toxic gases that cause acute respiratory infections. The smoke of the forest fires can spread to other areas so that the smog could disrupt people's activity in using transportation and could increase the probability of accidents in the areas. People who live close to the fire area face the risk of loss their burning house and property. Furthermore, the forest and land fires causes loss of business units due to the temporary stop of business unite operasional that is located near to the fire area. The loss and negative impacts of the forest and land fires get positive and serious responds from the elements and Keywords: Governance, Forest Fire Policy, Role, People's Participation, Partial Least Square

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policy makers in Indonesia.One of the efforts that have been made by relevant policy makers in order to prevent land and forest fires is doing preventive step by preparing forest security apparatus and utilizing hotspot data from NOAA satellite, Modis satellite (Tera and Aqua) to detect hot spots in the areas that are potential for forest and land fires to occure. Research on the role of government in overcoming forest fires (Hirsch et al., 2001; Wu et al., 2011; Sawerah et al., 2014; Samsul, 2015; Ekayani et al., 2016; Purnomo et al., 2017; Ifrani & Amrin, 2018; Syarifa et al., 2020; Muzdalifah, 2020). Forest fire control is generally carried out through prevention, extinguishing, and post-fire management efforts carried out at the national level to the level of forest management units. Fire prevention efforts through public awareness campaigns; improving preventive technology, such as forest fire warning and prevention, such as retention basins, green belts, public awareness campaign watch towers; and others; and software stabilization. Efforts to extinguish forest fires are carried out by improving extinguishing technology, extinguishing operations (early suppression and further extinguishing), and rescue and evacuation. Meanwhile, post-fire management efforts are carried out by monitoring, evaluating and inventorying ex-fire forests; socialization and law enforcement; and rehabilitation (Oodrivatun, 2014).

However, the effort is not optimum yet in resolving the forest fires problem. Controlling forest fires in the company/plantation/forestry areas is relatively easy. The implementation rules in the company/ plantation/ forestry are clear so that all forms of deviations will be easily controlled and sanctions can be applied more firmly if it is compared to the resident's land and abandoned agricultural lands. Meanwhile, shifting cultivator who are getting used to clear land by burning do not have any other alternative so that they will continue to use fire in clearing land. The problem of forest and land fires as it has been elaborated above as well as the prevention and control become the empirical problem raised by this research. As it has been presented in theoretical review, the implementation of good governance is affected by the role (of government) and participation (of community and stakeholders that is company).

Literature review

Several theories have built framework regarding thi research such as theory of governance, theory of good goernance, theory of dynamic governance, theory of regional autonomy, role theory, participation theory, and stakeholder theory. In role theory, partnership between government (central and local), private sector, and public is an important factor towards good forest governance. The government's function which are planning (a process to determine goals to be achieved in the future as well as the actions to be done to achieve the goals), organizing (the act of arranging and determining several important activities and giving authority to conduct the activities), staffing (the act to determine the needs of human resources, deployment, filtering, exercising, and workforce development), motivating (the act of mobilizing or distributing human behavior towards the goal that has been set, and controlling (the act of measuring implementation with purpose, determining the causes of deviations and taking corrective action if necessary), are able to achieve good governance, in this case, management forest and land fires control.In the perspective of participation theory, people's participation in the development planning is believed to be a keyword in the development of the current era of regional autonomy. The development that involves people's participation, however, fail to establish justice and community welfare. Participation is a bridge that connects government that has power, authority, and policy with citizen that has civil rights, politic, and social economic community. In the stakeholder theory, companies in the business service in modern era are demanded to pay attention to all stakeholders not limited to shareholders (leader, CEO, other shareholders) as well as surrounding community, environment, and government. Dynamic governance theory can explain the relation between company participation towards governance of the forest and land fires control. The theory of good governance shows that actors that are set in a governance includes three parties, which are: country, government, citizen, and private sector that is usually called state civil society-market that could bridge the implementation of good governance. All

of the theories above show a relation between the role of central government, citizen/company's participation towards the good governance. The research hyphothesis based on the research framework are presented below: H₁: The role of central government has a direct significant effect on the governance of forest and land fires control. H₂: people's participation has a direct and significant effect on the governance of forest and land fires control. H₃: company's participation has a direct and significant effect on the governance of forest and land fires control. H4: the role of central government has a direct significant effect on forest and land fires control. H₅: people's participation has a direct and significant effect on forest and land fires control. H₆: company's participation has a direct and significant effect on forest and land fires control. H7: The governance has a direct and significant effect on forest and land fires control. H₈: The role of central government has no direct and significant effect on on forest and land fires control through the governance. H₉: people's participation has no direct and significant effect on the forest and land fires control through the governance. H₁₀: company's participation has no direct and significant effect on the forest and land fires control through the governance.

METHOD

This research utilizes quantitative approach and survey method. This research was located in forest areas that have high posibilty to be aflame that includes seven provinces which are North Sumatra, Riau Jambi, South Sumatra, West Kalimantan, East Kalimantan, and Central Kalimantan. This study uses a quantitative approach with survey methodology. The study has aimed to assess the populations of both large and small areas by selecting and reviewing a carefully chosen sample of the overall population to find the incidence, distribution and relative interrelation of the variables examined (Kerlinger and Lee, 2000). The population of this research is 258 villages in the 7 main provinces that have land and forest fires. The sample taken is 72 villages from the total population, 285 villages. The sampling technique used is Area Proportional Random Sampling. To measure the variables, distributing questionnaires were sent to the respondents. For each answer, a score obtained using the Likert scale was given. The scores or weighting values used were "strongly agree (5)" to "strongly disagree (1)." The validity and reliability instrument was confirmed using SPSS (Gaur and Gaur, 2009). The inferential statistic method utilized in this research is Partial Least Square (PLS). Panel Partial Least Square (PLS) is more suitable in that it corrects itself for the omitted variable bias, and due to the presence of autocorrelation and heteroscedasticity in pooled time series data

ANALYSIS RESULTS Direct Effect



The test result of the structural moel of direct effect:

The effect of central government's role on the governance, it is obtained 0.3869 structural coefficient and 0.000 pvalue which indicates that there is a significant and positive effect between central government's role and the governance. The higher the role of the central government, the higher governance will also be. The effect of people's participation on the governance, it is obtained 0.3776 structural coefficient and 0.000 p-value, which indicates that there is a significant and positive effect between people's participation and the governance. The higher the people's participation, the higher governance will also be.The effect of company's participation on the governance, it is obtained 0.3131 structural coefficient and 0.000 p-value, which indicates that there is a significant and positive effect between government's participation and the governance. The higher the government's participation, the higher governance will also be. The effect of central government's role on the governance, it is obtained 0.1127 structural coefficient and 0.1743 p-value, which indicates that there is no significant and positive effect between central government's role and the land and forest fires control. The higher the role of the central government, the higher governance will also be. It means that no matter high and low the role of the central government, the level control of forest and land fires will not be affected. The effect of people's participation on the forest and land fires control, it is obtained 0.1386 structural coefficient and 0.1216 pvalue, which indicates that there is no significant effect between the people's participation and the forest and land fires control. It means that no matters high and low the the people's participation, the level control of forest and land fires will not be affected. The effect of company's participation on the forest and land fires control, it is obtained 0.0861 structural coefficient and 0.3451 p-value. which indicates that there is no significant effect between the company's participation and the forest and land fires control. It means that no matters high and low the the company's participation, the level control of forest and land fires will not be affected. The effect of governance on the forest and land fires control, it is obtained 0.6307 structural coefficient and 0.000 p-value, which indicates that there is significant and positive effect between the governance and the land and forest fires control. The higher the governance, the higher forest and land fires control will also be.

DISCUSSION

The high governance has impact on the high control of land and forest fires. The control of land and forest fires is reflected in six indicators first delivered by President Joko Widodo in National Coordination Meeting of Land and Forest Fires Control at January 18, 2016 in Istana Negara in an attempt to give direction to Coordinating Ministry, Ministry and Institution, Panglima (Commander) TNI, Pangdam, and Korem, Kapolri, Kapolda, Kapolres, Governor, and Mayor from eight fire-prone provinces in order to optimalize the control of land and forest fires. The direction includes: prevention and early warning, reward and punishment, ecosystem improment and structuring, field reviw, law enforcement, and central and regional synergy. The successful land and forest fires control could be achieved through the good governance. It is reflected in the implementation of prevention and early warning, reward, and punishment, ecosystem improment and structuring, field reviw, law enforcement, and central and regional synergy that has been conducted by the government since 2016. The implementation of the policy in controlling land and forest fires which involves many parties cannot be maximized without the role of good governance. The high role of the central government affects on the better control of land and forest fires through the good dovernance.

The increasing participation of people is expected to accelerate and realize a good governance. Participation is a bridge that connects government that has power, authority, and policy with citizen that has civil rights, politic, and social economic community. The real participation of citizen in an effort to control the land and forest fires could be seen in their participation in the implementation of integrated patrols in the village, practice of clearing land without fire as an effort to prevent the forest fire. Based on the relation between people's participation in the governance of controlling land and forest fires, it is obtained a strong result about the important of good governance. The higher people's participation will affect the high control of land and forest fires as well as high governance.

The high company's participation will not affect the land and forest fires control since, basically, the company is profit-oriented so that the problem of forest fires is not yet the priority to handle personally. The good participation of company will increase level of land and forest fires control as well as the good governance.Synergy between the central and regional governments is absolutely necessary to ensure the optimization of prevention efforts. The President's directive to increase the synergy between central and regional governments is manifested in the formation of a task force (task force) to control haze due to forest and land fires at the central, provincial and district levels. This task force is a forum for parties to work together in controlling forest and land fires, starting from prevention, suppression and law enforcement. The form of coordination and synergy built in controlling forest and land fires is that there must be a line of command / command, a line of coordination, support / assistance as well as reporting or information. One form of synergy and collaboration in controlling forest and land fires that has been carried out is the Integrated Patrol for the Prevention of Forest and Land Fires which began in 2016 involving Manggala Agni KLHK, TNI, POLRI, local government and communities, NGOs, volunteers (MPA, KTPA) which operates at the village level prone to forest and land fires. In 2016, the integrated patrols covered 731 vulnerable villages in 7 provinces (Riau, Jambi, South Sumatra, West Kalimantan, Central Kalimantan, South Kalimantan and East Kalimantan). In 2017, the area of integrated patrol coverage was expanded to 1203 villages prone to forest and land fires in 8 Provinces with the addition of North Sumatra Province. For 2018, the coverage of integrated patrols is 1255 fire-prone villages. Integrated patrols are the main activity at the site level involving parties with the aim of suppressing potential forest and land fire incidents and raising awareness to the community.

The synergy and collaboration in 2016 have produced tangible results in efforts to control forest and land fires, there was a reduction in the area of forest and land fires by 83.21% compared to the area of forest and land fires in 2015. This form of synergy and collaboration must be strengthened by a policy from the the central government which is then implemented by the local government (Province, Regency / City, District, Kelurahan and Desa) including stakeholders managing forest or land areas as well as the community, non-governmental organizations and volunteers (Community Caring for Fire, Farming Group Caring for Fire).

CONCLUSION

The role of central government has a direct and significant effect towards the good governance. The implication is the better and the right the implementation of reflection indicator which are planning, organizing, staffing, motivating and controlling will affect the good governance. The role of central government has no direct and significant effect on the land and forest fires control. The implication is the role of central government that does not directly affect the land and forest fires control. The role of central government has no direct and significant effect towards the control of land and forest fires through the governance. The implication is the role of central government will be successful and optimum in controlling the land and forest fire only if the activity is conducted through the good governance. The people's participation has a direct and significant effect towards a good governance. The implication is the more dominant indicators such as psychology, physic, skill, and materiil or money will affect the good governance. The people's participant has no direct and significant effect on the land and forest fire control. The implication is that the people's participation has no direct effect on the land and forest fire control. People's participation has no direct and significant effect on the land and forest fire control through the governance. The implication is that the citizen will optimally participate in controlling land and forest fires through the good governance. The company's participation has direct and significant effect on the good governance. The implication is that the better implementation of indicators such as psychology, physic, skill, and materiil or

money will affect the good governance. The company's participation has no direct and significant effect on the land and forest fires control. The implication is that the company's participation has no direct effect on the land and forest fires control. The company's participation has no direct and significant effect on the land and forest fires control through the governance. The implication is that the company will optimally participate in controlling land and forest fires through the good governance. The governance has direct and significance effect on the land and forest fires control. The implication is that the strong and dominant aspect indicators like accountability, supervision, responsiveness, profesionalism, eficiency and effectiveness, transparation, equality, forward-looking insight, participation and obedience, preventing activity and early warning, reward and punishment, improvement and arrangement of peat ecosystem , field survey, law enforcement, and synergy as well as coordination between central and regional will give good result.

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