

Policy Implementation of Water Resources Utilization in Nature Tourist Park Sintang Regency, West Kalimantan, Indonesia

Antonius^{1,*}, Abdul Hakim², Amin Setyo Leksono³, Endah Setyowati³

¹Doctoral Program of Environmental Science, Postgraduate School, Universitas Brawijaya, Malang, Indonesia

²Department of Public Administration, Faculty of Administrative Science, Universitas Brawijaya, Malang, Indonesia

³Department of Biology, Faculty of Mathematics and Natural Sciences, Universitas Brawijaya, Malang, Indonesia

Abstract The purpose of this study is to describe and analyse the implementation of water resource utilization permit policy in the Bukit Kelam Nature Tourist Park (NTP) of Sintang Regency. The research method using descriptive method with qualitative analysis approach presents data obtained from interview, library and field observation, then analysed and interpreted by giving conclusion. It is expected that this research can present a more in-depth description and result of analysis in accordance with the research focus. The results of the research indicate that the effective implementation of Circular Letter Number 1 of 2014 on Utilization Permit (IPA) and water energy utilization permit (IPEA) as well as technical considerations for application of water utilization permit (IUPA) and energy utilization permit water (IUPEA) in wildlife reserves, national parks, forest parks and natural tourism parks as well as Local Regulation Number 20 of 2015 on the Spatial Plan of Regencies that accommodate the utilization zone in the Bukit Kelam natural tourist park area is more due to the level of bureaucratic compliance that is still very poor, smooth routine procedures and implementation of benefits. This is strongly influenced by the content of the policies imposed by local governments in granting utilization permits. Information that is not socialized so as to get less response from the community.

Keywords Policy Implementation, Permit Utilization of Water Resources, Natural Park

1. Introduction

Water is a natural resource that is very useful and most potential in human life and other living things that can be said as economic good. In 1992, the Dublin Water Principles claimed “water as an economic good” for the first time in a UN view, though water has been recognized as an economic good for long time before 1992 [1]. Water demand continues to increase over time, one of which is caused by population growth factor. Increased public income and development in all areas demanded the fulfilment of water needs continues to increase. Over time the availability of water will decrease causing the water crisis. The clean water crisis is triggered by the behaviour of people who tend to be wasteful in using water. This is because water is considered public and unlimited. In addition to the increase in people's incomes and development in all areas, environmental degradation is also one of the factors that lead to a reduction in the source of

clean water.

Bukit Kelam NTP is a conservation area in Sintang Regency, West Kalimantan, Indonesia. In this park, there are several water springs as water resource for people surrounding. This water resource is used by people and entrepreneurs. Based on the existing data, among 114 water depot entrepreneurs using surface water, only 50 businesses have water utilization permits. In line with the dynamics of people's need for quality and safe drinking water to be consumed and accompanied by free market development and competition in the business world, many business actors are establishing refill drinking water depots. The use of water in the area has the potential to cause conflict due to water competition among users.

Based on the above situation, the Government of Sintang Regency responded to demand for water regulation by issuing Circular Letter 1 of 2014 [2] about Water Utilization Permit and Water Energy Utilization Permit as well as technical considerations for application of water utilization permit in wildlife reserves, national parks, forest parks, and nature tourism parks. These Permits derived from Local Regulation Number 20 of 2015 [3] on the Region Spatial Plan that accommodates the utilization zone in the Bukit Kelam NTP. The purpose of this study is to describe and

* Corresponding author:

jehanramdani@gmail.com (Antonius)

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analyse the implementation of water resource utilization permit policy in the Bukit Kelam NTP of Sintang Regency to more sustainable water management.

2. Methods

This research was conducted in Kelam Permai Sub-regency, Sintang Regency, West Kalimantan, Indonesia. Distance of research location with capital of Sintang Regency is about 34 km. Data collection techniques used are through direct observation of water resource objects, interviews and a focus group discussion with stakeholders. The method used in this research is descriptive with qualitative approach by describing the state of the subject and object of research based on existing facts.

A series of deep interviews was conducted in order to identify the implementation of government regulation on water resource utilization from the key informants. The interviews were done with key persons from several offices such as an Officer of Trade, Industry, Small and Medium Enterprises Cooperation, Investment Board of Licensing Service of Integrated Licensing, Natural Resources Conservation Centre of Conservation Section II Sintang, Office of Healthy, Board of Revenue from Regional Financial Management and Assets, and water depot entrepreneurs. In addition, several people in the conservation area of Bukit Kelam were also selected as the informants. Information and data obtained from the field and informants through interviews is not structured in depth, observation, and documentation studies. Researchers used methodological triangulation to extract data on water resource utilization permits through in-depth interviews, limited participant observation and secondary data analysis. The informants were selected using snowball sampling technique; the researcher must know several key informants first and then ask them to introduce another informant who can interview the interviewer.

3. Results and Discussion

3.1. Implementation of Water Resources Utilization Permit Policy

Implementation of Water Resources Utilization Permit Policy in Sintang Regency was based on Indonesian Government Regulation number 28 of 2011 [4]. This regulation was further translated into more operational and implementative regulations, namely Minister of Forestry Regulation number 64 of 2013 [5] on Water and Water Energy Utilization in Wildlife Reserve, National Park, Forest Park and Nature Tourist Park. Regulation of the Minister of Forestry was then followed up through Circular Letter of the Directorate General of Forest Protection and Nature Conservation Number 1 of 2014 [2] on Water Utilization Permit and Water Energy Utilization Permit, as well as Technical Considerations for Applications for Water

Use Permit and Water Resources Utilization Permit in Conservation Areas and strengthened through Local Regulation Number 20 of 2015 [3] on the Spatial Plan of the Regency that accommodates the utilization zone in the NPK area of Bukit Kelam. Ripley and Franklin explained that the implementation of water resource utilization permit policy is a process implementation of policies in the field of water resources. As for the business license already adjusted in Law number 20 of 2008 [6] on Micro, Small and Medium Enterprises, the implementation of policies was measured and assessed from bureaucratic compliance, bureaucratic services and implementing benefits. The actual condition of policy implementation was shown in Table 1. Detail explanation was provided below.

Table 1. Implementation of Water Resources Utilization Permit Policy

Bureaucratic aspects	Actual condition of implementation policy
Bureaucratic Compliance	Good, but still rigid and inflexible in reality
Bureaucratic Service	Information from the bureaucracy to public is not sufficient hence it is not easily understood by the people
Implementation and Benefit	The attitude of the policy implementers was less responsive as expected.

3.1.1. Bureaucratic Compliance

Compliance level of the policy implementers of the Office of Industry, Trade and Cooperatives of Small and Medium Enterprises as well as the Investment Board of Integrated Licensing Services as the licensor of licensing, the Environment Agency for Environmental Sustainability, the Health Office for water quality testing and the Office of Revenue Management of Finance and Regional Assets for tax revenue water was good, but still rigid and inflexible in reality. The rigidity was generally seen from the attitude of the policy implementers who pay less serious attention to each application file submitted by the public if it does not meet the established requirements. The ignorant of the implementers of the policy was illustrated by providing a less detailed explanation of requirements of each application for permission of utilization of water resources petitioned. This fact often makes the applicant disappointed with the attitude shown by the staff in implementing the permit policy of water resources utilization in Sintang Regency.

The mistakes often made by the applicant usually mislead the permit for the utilization of water resources to be obtained, so the criteria and requirements petitioned was wrong. Consequently the license expected by the applicant was delayed. The weakness of the applicant to recognize the permit for utilization of water resources needed was inseparable from the lack of information received by the applicant for the scope of licensing of the utilization of water resources set by the Sintang Regency Government. There were many applicants who did not recognize and know the criteria and requirements of permit utilization of water resources needed. Therefore, it is necessary to socialize the operational standards of clear water resource utilization

licensing procedures, either directly conducted to the public or announced on the information boards at the Office of the Investment and Licensing Agency for Integrated Sintang Regency.

3.1.2. Bureaucratic Service

Information and communication from bureaucratic service were among constrains. Implementing parties still lack of the information about the scope of permit utilization of water resources that have been set. As a result many applicants were less aware of the scope of utilization of water resources that can be licensed. Therefore, in practice many criteria and requirements were prepared by the applicant was incomplete or wrong to apply for permit utilization of water resources needed. The knowledge possessed by the applicant for the scope, criteria and requirements for submission of water resources utilization permit will direct the applicant to be able to follow the correct management mechanism. In addition, the explanation to every applicant community who make mistakes in the management also becomes important. In addition, the policy implementing agency should coordinate the implementation of the policy with the relevant agencies well, so that the necessary requirements of the recommendations can run smoothly.

3.1.3. Implementation and Benefit

The attitude of the policy implementers was less responsive as expected. Because in the process of policy implementation undertaken, policy implementers were still picky to provide responsive services to each applicant. As a result, the applicant community has not fully perceived responsive service from the policy implementers. So in reality, there are applicant communities who get a good response when doing the management and have shortcomings in the management, but also there are getting a poor response in the management of permits utilization of water resources. This condition was often made people disappointed at the attitude shown by the implementer of the policy in making permit utilization of water resources. This fact was what makes the issuance of permit for the utilization of water resources is still little published by the executor of the policy.

3.2. Weaknesses of the Implementation of Water Resources Utilization Permit Policy

Implementation of water resource utilization permit policy in conservation area of Bukit Kelam natural forest park based on Circular Letter number 1 of 2014 [2] on Utilization Permit and water energy utilization permit as well as technical consideration for business license application utilization of water and water energy utilization permit in wildlife reserves, national parks, forest parks, and natural tourism parks as well as Local Regulation Number 20 of 2015 [3] on the Spatial Plan of the Regency that accommodates the utilization zone in the area of natural tourism park Bukit Kelam, certainly not apart from obstacles

and constraints. According to Sunggono [7] policy implementation has several inhibiting factors that include:

Table 2. Weaknesses of the Implementation of Water Resources Utilization Permit Policy

Factor	Weakness
Content Policy	The policy content of water resource utilization permits is not specifically known to the public as the object of the policy.
Information	This study showed that delivery of information undertaken by the implementer of the policy has not been able to provide understanding and explanation to the community in the management of water resources utilization permit.
Public support	The public support to the government policy in the implementation of water resource utilization permit is still low.
Potential Distribution	Human resources have not been able to utilize the facilities and means of policy provided.

3.2.1. Content Policy

The policy content of water resource utilization permits is not specifically known to the public as the object of the policy. Basically, people have to know in detail about the content of permit policy of water resource utilization in Sintang Regency. Because with that knowledge the community can make permit utilization of water resources in accordance with the needs of the community itself. This factor sometimes causes obstacles in the effort to manage the utilization permit of water resources. According to Grindle [8], there are two major variables that influence the implementation of the policy, namely the content of the policy and the implementation environment. These policy content variables include the extent to which the interests of the target group or target groups are contained in the content of the policy; the types of benefits received by target groups to what extent the desired changes of a policy; whether the location of a program is correct; whether a policy has specified the staff in detail; whether a program is supported by adequate resources. Meanwhile, according to Wahab [9] policy environment variables include: how much power, interests, and strategies that are owned by actors involved in policy implementation; the characteristics of the institution and the regime in power; level of compliance and responsiveness of the target group. Based on the opinion of Grindle [8] and Wahab [9] above, it can be concluded that there are two similarities in opinion that there are actors involved in the policy, and have an interest in policy. However, Grindle explores more that policy content in order to accommodate target groups, must be benefits received, resulting in changes, clarity of programs, and actors responsible for policy implementation and the importance of strong resource support [8]. In addition, the public is more likely to highlight the content of the policy of the availability of staffs who perform services. Where the responsive

attitude of the staff to the services provided to the community is often a problem. Because there are still staffs who lack high responsiveness when they see the applicant community feel difficulty to take care of permit utilization of water resources. The staff should be more responsive to respond to the problems found by the applicant community in managing the utilization permit of water resources.

3.2.2. Information

Accurate data and information are the basis of all aspects of water resources management. Activities include data collection including water quality, topography, population, poverty level and so forth. Then there is the centre for data management and storage, distribution and sharing of data and information among stakeholders, development of mechanisms and tools that can assist for decision making such as geographic information system, hydraulic model and so on. The information factor also impedes the implementation process of water resources utilization permit policy. This study showed that delivery of information undertaken by the implementer of the policy has not been able to provide understanding and explanation to the community in the management of water resources utilization permit. The method of delivering information conducted by policy implementers was limited to giving circular to the target group only to obediently meet and follow the circular. Shalihin and Selintung [10] argues that there is no clarity and synchronization or synergy in the implementation of management causes lack of compliance and commitment of each institution in carrying out its responsibilities. Various conflicts can occur, because between stakeholders do not support each other. The problems that have occurred that the government has implemented mapping the utilization of water blocks, but have not been monitored effectively, which causes the increasingly widespread business people to sell water from Bukit Kelam NTP. Any information relating to hydrological data in the Bukit Kelam area is certainly an important basis in making water resource management planning. The failure to implement water resources management policy according to MacKay and Ashton [11] caused by insufficient and complete communication from all the sectors involved, has led to a lack of harmonization and cooperation at the operational level; regulations have not been widely known to the public; the capacity to implement local level policies is not clearly known to the public; the responsibility for implementation has been halted where the government and the community have not been able to cooperate in synergy in implementing the policy itself. Needs and agreements between stakeholders on priority issues have not gone hierarchically. The local government also has the authority to collect and analyse hydrological data for the purposes of water management and deliver the results to all government agencies, researchers, and the public at large in order to raise awareness and awareness of the value of water, to participate actively in decision-making processes water management located in the conservation

area. Communication and dissemination of information certainly requires seriousness or concrete steps such as through the media or face to face with the community.

3.2.3. Public Support

The public support to the government policy in the implementation of water resource utilization permit is still low. This fact is evident from the low involvement of stakeholders in the implementation of the policy, whether from non-government organizations (NGO) or local elites. This lack of involvement leaves no critics and suggestions for implementing government policies. As a result there is no improvement in the process of service permit utilization of water resources in Sintang Regency. This is evident from the existing data that the number of people who take care of the permit utilization of water resources a little. In addition, the applicant community complained about the absence of operational standard procedures in the management of water resource utilization permits.

3.2.4. Potential Distribution

Potential distributions under review of facilities and policy facilities are well available. This fact is evident from the observation of the applicant's community in each taking care of the utilization permit of water resources in the implementing organization of the policy. Working facilities are available quite well, such as the existence of desks, computers, stationery and so forth provided at the booth for the permission of the utilization of water resources. While the policy facilities provided such as service buildings, waiting rooms and parking areas in the building service is also good. The facilities and policy facilities provided already meet the standards as a public service agency. But the existing human resources have not been able to utilize the facilities and means of policy provided. The existing facilities and policy tools can be utilized to help implement the policy well. One of the facilities and facilities that are not yet available is a notice board about the management of water resources utilization permit to inform the applicant community about the criteria and requirements that must be fulfilled in arranging the permit for the utilization of water resources.

Given the existing weaknesses in the implementation of water management policies, this is largely because the government is less concerned about the implementation of field policies. Some of the problems associated with the management of water resources that often occur are:

- centralistic policy implementation;
- unclear scope of boundaries of areas with community settlements, as local community mapping is not involved.
- the water and the settlement of boundary clarity;
- weak coordination and cooperation between agencies and the community; and
- insufficient number of human resources for preservation (ranger) in the conservation area (12).

The problem of water resources management in

developing countries is generally the same that is marked by high pressure to implement top-down management, command and increased control over natural resource management. This is manifested in efforts to control ecosystems and socio-economic institutions that respond to uncertain ecosystem behavior with greater control. At the same time, the role of natural managers, especially the government becomes powerfully increasing [13]. It is therefore necessary to make a real effort to improve this condition. The management of water resources in the area should be seen as a compromise approach, where the utilization of water resources is not only bureaucratic top down but must maintain and respect local rights. Thoughts proposed by communities around the area as water users to reduce the problem required cooperation at all levels with stakeholders and communities at the lowest level in policy planning and decision making, where water are assets and rights to all human beings and should be utilized with the right quantity and quality. The main priority should be how to use or manage water resources wisely [14].

Governments play a key role in organizing and managing processes in more structured community empowerment into context, processes and outcomes, plus feedback loops to account for changes in cyclical and repetitive learning processes. The context refers to the structure of governance and the natural environment in the watershed. To improve the circumstances of the environment implicitly in practice most often occurs changes in governance structures. The process refers to multiparty interactions in formal or informal negotiations; This type of process is central to the iterative policy [15] Therefore, it is necessary to manage water resources based on the principle of eco-efficiency, at a low cost minimizing negative impacts on the environment. Eco-efficiency has two principles namely the optimization of environmental carrying capacity and the principle of increasing the efficiency of raw materials because it will save water usage.

The governance systems have to be more flexible and to take uncertainty into account [16]. New strategies to manage risks in integrated water resource management and emphasizes the need to consider economic, social, and political uncertainties, which are often of more importance than environmental uncertainties [17]. It is possible to distinguish the different types of social uncertainty that need to be taken into account when addressing a management problem [18].

4. Conclusions

Implementation of water resources utilization policy in Sintang Regency based on Circular Letter Number 1 of 2014 on Water Utilization Permit and Water Energy utilization permit as well as technical consideration for application of water utilization permit and business license utilization of water energy in wildlife reserves, national parks, forest parks, and natural tourism parks as well as Local Regulation

Number 20 of 2015 on the Spatial Plan of the Regency that accommodates the utilization zone in the Bukit Kelam natural tourism park area has not been applied properly. This fact is indicated by the still executioner's foot in following the established rules and mechanisms. Therefore, in the implementation of the handling done by the applicant was still many that cannot be published, because the criteria and requirements are not fulfilled by the applicant. This is because to get permission must have recommendation from the central party. Then the absence of general guidance and technical guidance in the implementation of water resource utilization permit policy also disrupts the smoothness of routine procedures implementation. The staff encountered difficulties in practice because general guidance and technical guidance was not available. These general and technical guidelines became the capital for the staff to be able to implement the policy in accordance with the goals and objectives of the service. For that need to be done improvements on the attitude of the staff in order to provide services publication permit utilization of water resources well in Sintang Regency. The dominant inhibiting factor in the implementation of water resources utilization policy in Sintang Regency is the lack of socialization and policy communication by the staff so that every applicant community knows and understands how to take care of the permit. Supporting factors are also expected from every component of society that has a concern for government programs.

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REFERENCES

- [1] Rogers, P., de Silva, R., Bhatia, R. 2002. Water is an economic good: How to use prices to promote equity, efficiency, and sustainability. *Water Policy*, 4: 1-17.
- [2] PJLKHLI. 2014. Circular Letter Number 1 about Water Utilization Permit and Water Energy Utilization Permit as well as technical consideration for application of water utilization permit and business license utilization of water energy in wildlife reserves, national parks, forest parks, and natural tourism parks.

- [3] Sintang Regency. 2015. Local Regulation Number 20 on the Region Spatial Plan in Sintang Regency 2015-2035: the utilization zone in the Bukit Kelam NTP.
- [4] Republic of Indonesia. 2011. Indonesian Government Regulation number 28 about management of natural sanctuary area and nature conservation area.
- [5] Minister of Forestry. 2013. Regulation No. 64 on Water and Water Energy Utilization in Wildlife Reserve, National Park, Forest Park and Nature Tourist Park.
- [6] Republic of Indonesia. 2008. Law No. 20 on Micro, Small and Medium Enterprises.
- [7] Sunggono, B., 1994, Hukum dan Kebijaksanaan Publik. Sinar Grafika Publisher, Jakarta.
- [8] Grindle, M. S. 1980. Politics and Policy Implementation in the Third World. Princeton University Press, New Jersey.
- [9] Wahab, S.A., 2008, Policy Analysis from Formulation To. Implementation of State Policy. Second Edition. Bumi Aksara Wibawa Publisher. Jakarta.
- [10] Shalihin, R., Barkey, R., and Selintung, M. 2012. Evaluasi kebijakan kabupaten/kota dan provinsi dalam mendukung Kawasan Strategis Nasional Maminasata (Studi Kasus: Pengelolaan Sumber Daya Air). Graduate School, Hasanuddin University. Makassar.
- [11] MacKay, H.M., and Ashton, P.J. 2004. Towards co-operative governance in the development and implementation of cross-sectoral policy. CSIR, PO Box 395, Pretoria 0001, South Africa.
- [12] Antonius, Hakim, A., Leksono, A.S., Setyowati, E. 2018. Water resources management through government policy and local wisdom in Bukit Kelam Nature Tourist Park Sintang Regency West Kalimantan Indonesia. International Journal of Science and Research (IJSR), 7(1): 645-651.
- [13] Holling, C.S., Meffe, G.K. 1996. Command and control and the pathology of natural resource management. Conservation Biology, 10(2): 328-337.
- [14] Chaudhary, V., Jacks, G., Gustafsson, J.E. 2002. An analysis of groundwater vulnerability and water policy reform in India. Environmental Management and Health, 13(2), 175-193.
- [15] Pahl-Wostl, C., Sendzimir, J., Jeffrey, P., Aerts, J., Berkamp, G., Cross, K. 2007. Managing change toward adaptive water management through social learning. Ecology and Society, 12(2): 30.
- [16] Rogers, P., Hall, A. 2003. Effective water governance. TAC Background Papers, No. 7. Global Water Partnership, Stockholm, Sweden.
- [17] Rees, J. 2002. Risk and integrated water management. TAC Background Papers, No. 6. Global Water Partnership, Stockholm, Sweden.
- [18] Walker, W., Harremoës, P., Rotmans, J., Van der Sluijs, J., Van Asselt, M., Jansen, P., Krayen von Krauss, M. P. 2003. Defining uncertainty: a conceptual basis for uncertainty management in model-based decision support. Journal of Integrated Assessment 4(1):5-17.