IMPLEMENTATION ANALYSIS OF PUBLIC INFORMATION DISCLOSURE POLICY: A CASE STUDY OF THE FOREST MANAGEMENT TECHNICAL PERSONEL INFORMATION SYSTEM (THE SIGANISHUT)

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(THE SIGANISHUT). The analysis of public information disclosure policy implementation is a crucial step in improving services and providing strategic references for government public information programs. The Forest Management Technical Personnel Information System (SIGANISHUT) was developed under the Ministry of Environment and Forestry (MoEF) Regulation No. 8 of 2021. This study examined the implementation of public information disclosure within SIGANISHUT, which is managed by the Directorate of Fees and Forest Product Distribution, Directorate General of Sustainable Forest Management. Using qualitative methods—including in-depth interviews, literature reviews, and observations—this study found that SIGANISHUT is managed with a user-centered approach. However, challenges persist regarding resource availability and disposition. The system requires additional personnel and increased budget allocation to support field-level policy socialization. Despite these challenges, policy implementers demonstrate accountability in implementing MoEF Regulation No. 8 of 2021 and respond effectively to user complaints and operational issues. From a bureaucratic perspective, the current framework adheres to the Standard Operating Procedures outlined in the regulation, with a well-coordinated division of responsibilities among implementers. SIGANISHUT streamlines bureaucracy by reducing service times through digital integration.

With sufficient support and well-designed policies, the legislative mandate on public information disclosure can be implemented more effectively and efficiently. This study underscores the importance of continuous evaluation and development to ensure SIGANISHUT meets stakeholder expectations and contributes to transparency and accountability in sustainable forest management.

Keywords: Policy implementation, public information disclosure communication, SIGANISHUT

ANALISIS IMPLEMENTASI KEBIJAKAN KETERBUKAAN INFORMASI PUBLIK: STUDI KASUS SISTEM INFORMASI KEPEGAWAIAN TEKNIS PENGELOLAAN HUTAN (SIGANISHUT). Analisis implementasi kebijakan keterbukaan informasi publik merupakan langkah penting untuk meningkatkan layanan dan memberikan referensi strategis untuk program informasi publik pemerintah. Sistem Informasi Tenaga Teknis Pengelolaan Hutan, yang dikenal sebagai SIGANISHUT, dikembangkan berdasarkan Peraturan Menteri Lingkungan Hidup dan Kehutanan (PermenLHK) No. 8 Tahun 2021. Studi ini meneliti implementasi keterbukaan informasi publik dalam SIGANISHUT yang dikelola oleh Direktorat Iuran dan Penatausahaan Hasil Hutan, Direktorat Jenderal Pengelolaan Hutan Lestari. Kementerian Kehutanan. Dengan menggunakan metode kualitatif, termasuk wawancara mendalam, tinjauan literatur, dan observasi, studi ini menemukan bahwa SIGANISHUT dikelola dengan pendekatan yang berpusat pada pengguna. Ketersediaan sumber daya dan disposisi menjadi tantangan. Sistem ini membutuhkan tambahan personel dan peningkatan alokasi anggaran untuk sosialisasi kebijakan di tingkat lapangan. Di sisi lain, pelaksana kebijakan telah

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menunjukkan akuntabilitas dalam menerjemahkan PermenLHK No. 8 Tahun 2021 serta responsif terhadap keluhan pengguna dan masalah operasional. Dari perspektif struktur birokrasi, kerangka kerja saat ini mematuhi Standar Operasional Prosedur yang diatur dalam peraturan, dan pembagian tanggung jawab antar pelaksana telah terkoordinasi dengan baik. SIGANISHUT menyederhanakan birokrasi dengan mempercepat waktu layanan melalui integrasi digital. Dengan dukungan yang memadai dan kebijakan yang terukur dengan baik, mandat legislatif tentang keterbukaan informasi publik dapat diimplementasikan dengan lebih efektif dan efisien. Studi ini menekankan perlunya evaluasi dan pengembangan berkelanjutan untuk memastikan bahwa SIGANISHUT memenuhi ekspektasi para pemangku kepentingan dan berkontribusi pada transparansi serta akuntabilitas dalam pengelolaan hutan lestari.

Kata kunci: Implementasi Kebijakan, Komunikasi Keterbukaan Informasi Publik, SIGANISHUT

I. INTRODUCTION

The Industrial Revolution 4.0 has "forced" all business processes to use Information and Communication Technology (ICT), not least in government business processes. With the growing complexity of the need to process data and information, ICT has become a vital component of an organization's business strategies and approaches. Strengthened by the demands of the Sustainable Development Goals, the government must create effective, accountable, and transparent institutions to implement sustainable governance. Therefore, the public information disclosure concept initiation in various government sectors is strategic to avoid abuse of authority.

The public information disclosure concept is also in line with the fourth nawacita of President Joko Widodo, which is to make the government always present by building clean, effective, democratic, and reliable governance (Tim Komunikasi Pemerintah Kemkominfo, 2016). In simple terms, public information disclosure can be understood as a concept that allows the public to access open data from government websites based on applicable regulations. The open data concept is expected to create evidence-based policymaking in sustainable development governance (Maizunati, 2018). Government-held quantitative, administrative, and operational data provide significant opportunities for evaluation to improve the efficiency and effectiveness of policies and programs (Hanrahan, 2017). The government has set various regulations to support the policy, as in Law No. 14 of 2008 on Public Information Disclosure, and regulates the data categories that the public can access and the data type that the public cannot access as in Government Regulation of the Republic of Indonesia No. 61 of 2010 on the Implementation of Law No. 14 of 2008 on Public Information Disclosure and Presidential Decree No. 3 of 2003.

In 2020, the Forest Management Technical Personnel Information System, also known as the SIGANISHUT, was launched. Establishment of the SIGANISHUT based on the Regulation by the Minister of Environment and Forestry of the Republic of Indonesia (MoEF) No. 8 of 2021 on Forest Governance and the Forest Management Plan Preparation, as well as Forest Utilization in Protected Forests and Production Forests.

The SIGANISHUT is designed as a series of electronic devices and procedures that function to prepare, collect, process, analyze, store, display, announce, send, and disseminate information related to GANISPH. GANISPH is an abbreviation for Forest Management Technical Personnel, a technical officer mandated to do forest management based on related regulations.

As one of the public information and service programs, the SIGANISHUT is designed in the form of public information disclosure and e-service of GANISPH which is

under the authority of the Directorate General of Sustainable Forest Management, Ministry of Environment and Forestry (MoEF). The SIGANISHUT presented to provide online-based services for the community, especially for forest management technical personnel and other stakeholders. In order to avoid maladministration, it is important to implement public information disclosure in the implementation of the SIGANISHUT.

The analysis of the public information disclosure policies implementation is one of the first steps in implementing policy evaluations to improve services and produce references and references for the performance strategy of the government's public information program. This is in accordance with the mandate stated in the Presidential Instruction on National Policy and Strategy for E-Government Development in 2003.

There are 5 (five) stages in public policy (Dunn, 1994). Stage one is agenda setting. After that, formulating a legitimate policy; stage three is implementing the policy. Implementing the policy becomes our focus in this study before evaluating implementation and performance as stage four, and the effects of the policy as the last stage.

Public information disclosure is related to transparency. Transparency in the form of openness and honesty are the ideals of implementing a democratic and sustainable government risk management more specifically (Ihlen, Øyvind, Just, S.N., Kjeldsen, J.E., Mølster, R., Offerdal, T.S., Rasmussen, J., Skogerbø, 2022). To nuance this understanding, some researchers have introduced some distinctions such as service quality (Adelia et al., 2016), implementation level (Handayani & Kardia, 2010), e-government implementation (Nur, 2014), and service digitization (Ahmad, 2020) regarding e-government research theme.

Several different approaches were used even though the object under study was the same. In Adelia's (Adelia et al., 2016) research, they used the e-Government Service Quality and Service User Satisfaction variable to measure service quality quantitatively. Then in Handayani's (Handayani & Kardia, 2010) research, she chose the Deloitte & Touche frame of reference to analyze the E-Government implementation level on the ministries level using the three ministries as a comparison in her paper. Ahmad (Ahmad, 2020) used Incremental innovation approaches to research digitizing village government services. This approach focused on the use of knowledge and technology solutions. Meanwhile, research related to the implementation of Public Information Disclosure was carried out by Nupikso (2015) through a qualitative approach by taking research objects at 7 (seven) SKPD (Local Government apparatus in Indonesia) in Palu city using Computer-Mediated Discourse Analysis.

There are many studies related to government public information disclosure in the form of digital platforms using different research approaches. Unfortunately, until now, it is still a challenge to find research related to the use and evaluation of forestry information systems that help manage the sustainable forest in Indonesia. Meanwhile, MoEF, as the mandate holder for forestry and environmental management in Indonesia, has already started using information systems in forestry management.

Therefore the author brought the theme of The SIGANISHUT as an analysis material for implementing forest management policies that focus on human resources because scientific literature related to this matter still needs to be widely available. In fact, the capacity of human resources is one of the critical factors in achieving sustainable forest management (Soetaryono, 2000); Acosta, R.T.,& Rodney, 2006; Nursalam, 2010) of MoEF Regulation No. 8 of 2021 through the implementation of SIGANISHUT. The findings of the study will be beneficial for policymakers, especially within the scope of the MoEF, in determining policies for sustainable forest management especially in human capacity management. After all, the support from policy-implementing organizations and the resources support is vital

(Aritonang, 2011).

II. MATERIAL AND METHOD

A. Research Focus and Time

This research focused on the implementation of Regulation Implementation of the MoEF No. 8 of 2021 through the Forest Management Technical Personnel Information System (the SIGANISHUT). The SIGANISHUT is an Information System of Forest Management Technical Personnel (GANISPH) under the authority of the Directorate General of Sustainable Forest Management, MoEF. The research itself was conducted from 21 February to 23 March 2022.

B. Data Collection Methods

Initially, the study was designed as a qualitative study, involving both interviews with 1 (one) key informant from the Sub-Directorate of Fees and Forest Products Administration, Dit. Fees and Forest Product Distribution (IPHH), MoEF with the position of the SIGANISHUT's administrator and 1 (one) supporting informant in the managerial position. They were the representation of the policy implementor in MoEF Regulation No.8 of 2021.

To strengthen the analysis of the problems studied, the research question used to interview informants refers to four variables that influence the implementation of policies, namely: communication, resources, disposition, and bureaucracy structure, based on the implementation policy theory of George C. Edwards III (Subarsono, 2021).

There are four variables affecting policy implementation from Edwards III's point of view, which are (1) Communication, is related to communicating the goals and objectives of the policy to the target group. In addition, these policy decisions and orders must be passed on to the appropriate personnel. The implementers must carefully understand them to reduce the distortion of implementation; (2) Resources: sources can be an important

factor in implementing public policy, including implementor competence, authority, and facilities; (3) Disposition: disposition is the character and characteristics possessed by the implementor, such as support for the implementation of policies, commitment, and honesty; and (4) Bureaucracy structure: the bureaucratic structure in charge of implementing policies significantly influences policy implementation. Edwards emphasizes two characteristics of bureaucracy: basic work procedures, better known as standard operating procedures, and fragmentation or pressure outside the bureaucratic unit. (Subarsono, 2021; Winarno, 2007).

The recent study also conducted an indepth inquiry into the SIGANISHUT System Information website on https://siganishut.menlhk.go.id to see the disclosure of information claimed to have been carried out by the SIGANISHUT management. In the observation activities carried out, we also monitored the achievements of the SIGANISHUT service and the constraints that occurred, both technical and non-technical/human error.

C. Data Analysis Methods

The SIGANISHUT is considered a digital embodiment of the implementation of the MoEF Regulation No. 8 of 2021 because the public service and information programs presented in the information system originate from it.

Research data were processed from in-depth interviews, observation on the SIGANISHUT official site, and literature studies. A minisurvey was also conducted to enrich the analysis of SIGANISHUT's utilization from the GANISPH's point of view. It was conducted in November 2022 regarding the perceptions of SIGANISHUT users about the benefits of SIGANISHUT and was participated by 36 respondents.

The collected data related to the SIGANISHUT implementation policy then were processed through data reduction by

identifying and coding the unit. The data from the mini-survey were delivered descriptively. Furthermore, conclusions were taken after data was served. The data was analyzed using the theoretical framework of four variables affecting policy implementation from George C. Edwards III (Subarsono, 2021).

III. RESULT AND DISCUSSION A. Brief Overview of SIGANISHUT

The SIGANISHUT was launched on November 13, 2020, to provide electronic services related to GANISPH and as a medium of public information for the public. In line with Presidential Instruction No. 3 of 2003, which mandates communication and information technology in government or what is often referred to as e-government, The SIGANISHUT is being pursued as public information and service by prioritizing effectiveness, transparency, and accountability.

Before the launch of The SIGANISHUT, the Forest Management Technical Personnel (GANISPH) business processes were carried out conventionally. For example, the issuance of the assignment letter for GANISPH is done manually, so it is quite time-consuming in the issuance process. The GANISPH registration number is determined by the head of the production forest management office, as well as the appointment and issuance of the GANISPH letter. This is considered less effective. Through the SIGANISHUT, several lines have been cut so that the head of the production forest management office only assigns GANISPH while the GANISPH's letter is automatically issued through the SIGANISHUT.

In addition, other administrative obstacles faced in managing the issuance of the GANISPH assignment letter include: follow-up documents that do not follow the completion time procedure, Some documents are difficult to track due to poor filing, achievements not being measured accurately and real-time, as well as up-to-date data of GANISPH is still not optimal.

Now, based on observations on the official website, there is information that can be accessed in real-time and is open to the public. Such as: (1). GANISPH base growth; (2). GANISPH e-registration base growth ratio; (3). GANISPH assignment base growth ratio; (4). Information on the issuance of a statement on the results of the GANISPH performance assessment; as well as the performance status of GANISPH, which is presented in chart form and can be known in real-time. This makes it easier for stakeholders to carry out evaluation and traceability. Therefore, this information system is designed to be accessible anytime, anywhere in accordance with the slogan of the SIGANISHUT, flexi-time flexi space. the chosen web-based platform is considered matched with the tagline of the SIGANISHUT, because the advantage of using a computerbased information system is that the data presented will be faster, more precise and accurate (Artanaya & Yadnyana, 2016). Based on the observation on the SIGANISHUT's interface in https://siganishut.menlhk.go.id (as shown in Figure 1), it is known that the SIGANISHUT displays some information and public services which are.

- The availability of information diagram of Forest Management Technical Personnel (GANISPH); It informs the GANISPH officer who has served and has not served
- 2. Information diagram for the GANISPH assignment
- 3. Search tool for GANISPH registration
- 4. Search tool for GANISPH assignment
- 5. Search tool for GANISPH.

There are two user categories in the SIGANISHUT. The first is the users who can only view public information presented on the SIGANISHUT interface. The second is the users who have access rights based on laws and regulations according to their authority.

Considering the interview result and the research conducted by Doll & Torkzadeh (1988) on user categorization, the two user categories of the SIGANISHUT can be identified as

primary and secondary users. The users who can only view public information presented on the SIGANISHUT interface are categorized as primary users. It can be any party interested in the SIGANISHUT's public information that is served. According to Sugandi (2011), citizens, community businesses, government employees, and government agencies are the main customers of E-Government services.

While, secondary users in the SIGANISHUT can be identified as Forest Management Technical Personnel (GANISPH), KLHK (the SIGANISHUT managers, administrator, helpdesk of the Directorate General in charge of sustainable forest management, Head of Provincial Service, Head of the Production Forest Management Unit (BPHP), the holders of Business Permits for Forest Utilization, the holders of Business Permits for Processing Forest Products, the holders of Forest Management Rights, the holders of social forestry management, the holders of authorizations utilization of wood for nonforestry activities, and other parties who hold permission from the Director-General.

The application of the SIGANISHUT is mandatory for secondary users. To maximize service satisfaction to users, the policy that needs to be emphasized in this section is to know for sure the users' characteristics from this public information and service program.

According to the SIGANISHUT administrator, this information system is web-based to make it easier for users to access via a computer or smartphone. This is in line with Turban, Lee, King, & Viehland's opinion that a web-based information system can facilitate access to information or knowledge transfer that can be done by anyone, anywhere and anytime (Turban et al., 2004).

B. The SIGANISHUT Implementation Policy

Ripley and Franklin opined that implementation happens after the laws are settled, which gives the authority to program, policy, benefit, or tangible output. In a policy, implementation is a crucial thing. In Edwards III's view, policy implementation is affected by four variables which are (1) Communication, (2) resources, (3) disposition, and (4) bureaucracy structure (Subarsono, 2021).

In this context, communication refers to all communication activities carried out by related parties in implementing the SIGANISHUT policy. Resources refers to mapping the strengths and weaknesses of the human resources managing the SIGANISHUT. This section is under the auspices of the Directorate of Fees and Forest Product Distribution (IPHH Directorate), Directorate General of Sustainable Forest Management,



Source: https://siganishut.menlhk.go.id, accessed 25 February 2022

Figure 1. The SIGANISHUT User Interface

MoeF. Disposition relates to the attitudes and responsibilities of the SIGANISHUT administrator, while bureaucracy structure can be interpreted as a part or unit of a large organization assigned to carry out task functions to achieve organizational goals.

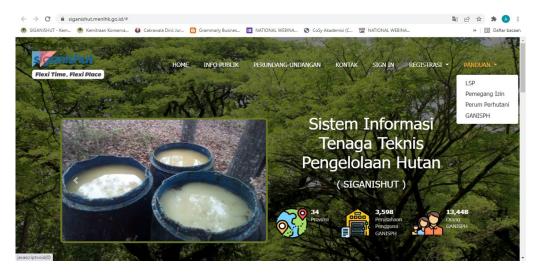
1. Communication

According Agustiono (2006),communication is one of the essential variables that influence the implementation public policy. Communication determine the success of implementing public policies' objectives (Agustiono, 2006). The communication activities that the policy implementers have carried out must be aligned with the vision targets to increase the effectiveness of policy implementation. Communication can convey programs or policies and educate the user's target.

In Edwards' concept of policy implementation theory, the first requirement for effective policy implementation is that those who implement decisions must know what they are doing. From interviews with the informants, it is known that the policy implementers had carried out one form of communication through the socialization of the SIGANISHUT. As representatives of the policy implementers, the administrator communicated with The

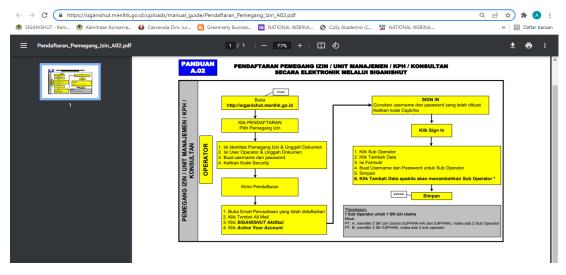
SIGANISHUT officers at the Production Forest Management Unit (BPHP), GANISPH, Perum Perhutani, and business permit holders as the target group. This socialization was also used to update additional information regarding the realization of MoEF Regulation No. 8 of 2021. As a direct consultation regarding obstacles and information, the participants felt it needed to be clarified. Unfortunately, face-to-face socialization cannot be carried out throughout the year because there was no budget at the IPHH Directorate in 2020 and 2021. In 2021, there had been three online SIGANISHUT socializations facilitated by BPHP, namely BPHP Region VI Bandar Lampung, BPHP Region X Palangka Raya, and BPHP Region XI Samarinda.

To help secondary users in general, the policy implementor, the IPHH Directorate, has provided guidelines (Guidelines = panduan in Indonesian language) for using the SIGANISHUT on its website (as shown in Figure 2, Figure 3, Figure 4 and Figure 5). The guidelines are categorized according to users: LSP (Professional Certification Institution), Permit Holders, Perum Perhutani, and GANISPH. However, the particular guide for LSP is still not readily available because the business processes were still in the preparatory stage at the time of this study.



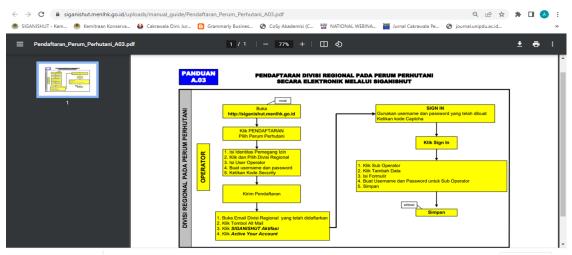
Source: https:// siganishut.menlhk.go.id, accessed 23 March 2022

Figure 2. THE SIGANISHUT User Guide



Source: https://siganishut.menlhk.go.id, accessed 23 March 2022

Figure 3. The SIGANISHUT User Guide for Permit Holders



Source: https://siganishut.menlhk.go.id, accessed 23 March 2022

Figure 4. The SIGANISHUT User Guide for Permit Holders

The Communication media between SIGANISHUT operator at **BPHP** and SIGANISHUT administrators WhatsApp Group (WAG). This WAG is used to deliver information, complaints/problems of secondary users related to implementing the SIGANISHUT, and solutions/resolving issues by The SIGANISHUT managers to The SIGANISHUT officers at BPHP. A help desk channel is also provided for users who encounter difficulties using The SIGANISHUT.

Other communication problems that appeared were related to personal errors. The

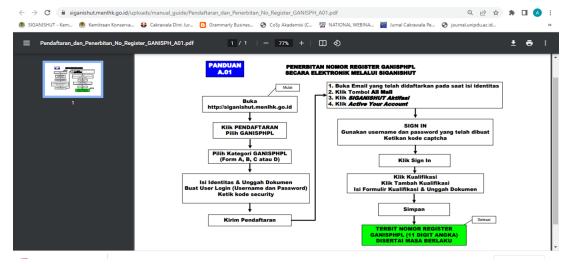
users forgot their user logins (username and/ or password). GANISPH and license-holder operators often experience this problem. According to the administrator, it has often been emphasized to record usernames and passwords on paper and save them properly when users register. Unfortunately, until now, many users still have problems with this, which means that the information on preventing forgetting to log in from the administrator still needs to be fully complied with.

Another obstacle was indiscipline from GANISPH and permit holders at the time of

registration. GANISPH and permit holders did not follow the provisions as stipulated in The SIGANISHUT. The administrator found many GANISPHs who chose the wrong registration form, GANISPHs or permit holders uploaded documents that were not following the requirements. This condition will cause The SIGANISHUT officers to reject the GANISPH assignment application phase submitted by the permit holder at BPHP.

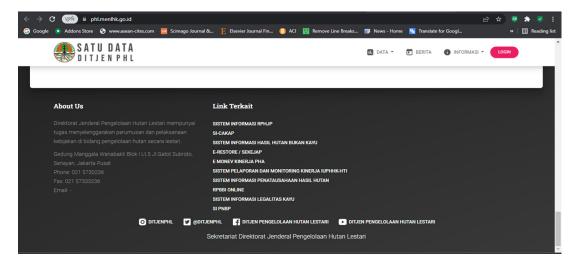
The administrator will lock the account in question for users monitored several times for such undisciplined actions. The account will be re-opened after the user follows the proper requirements.

Through observations on the PHL official website (https://phl.menlhk.go.id/) which is echelon 1 of the IPHH directorate, it is known as the SIGANISHUT link has not been included in the related link on the website (as shown in Figure 6). The inclusion of the SIGANISHUT link is highly recommended because the website can function as a medium for promotion and socialization related to public services and information owned by the Directorate General of PHL in general and



Source: https://siganishut.menlhk.go.id, accessed 23 March 2022

Figure 5. The Siganishut User Guide for GANISPH



Source: https://phl.menlhk.go.id, accessed 23 March 2022

Figure 6. Related Link Display on Official Website of Directorate General PHL

specifically for the IPHH Directorate, which is responsible for The SIGANISHUT.

2. Resources

The biggest challenge in building a quality public information and communication system is the information packaging and information management needed by the public in an accurate, attractive, and quality manner (Abidin, 2016). This is why human resources who understand the technical substance and have knowledge in the IT field are needed in carrying out The SIGANISHUT for its public info and e-services. Based on Yalia (2014), the resource factor is key for policy implementation effectiveness. Without adequate resources, policies can't be implemented properly.

At the IPHH Directorate, the SIGANISHUT has one administrator officer in charge of ensuring the operation of SIGANISHUT. Based on the interview, he has a background in forestry and information technology. He also considered having good knowledge on the SIGANISHUT since he joined the design team of SIGANISHUT. The SIGANISHUT administrator ensures that the SIGANISHUT is under the business processes regulated in MoEF Regulation No. 8 of 2021. In his assignment, the administrator is assisted by a third party responsible for IT.

To deepen the understanding, interviews with the manager have also been done. Related to human resources, she is aware of the need for additional people to assist the administrator officer in running the SIGANISHUT at the moment. It is hoped that increasing the number of members can help each other solve problems. According to the SIGANISHUT's administrator, additional personnel are required and are expected to have the responsibility, competence, and good knowledge of the SIGANISHUT's business processes.

The policy form to support financial resources carried out by the Directorate General of Sustainable Forest Management is through the SIGANISHUT development budgeting. Based on the interview, the

SIGANISHUT uses local storage with a single server for application and database services. It is known that the SIGANISHUT server is planned to be combined with SIPUHH's server because SIPUHH's server space still has a lot of capacity. It can be further improved by adding investment in the SIGANISHUT maintenance to strengthen the system's quality from functions to data and information security and the addition of local storage to anticipate the increase in the SIGANISHUT users in the future. After all, the financial resource is a part of the resource factor along with the policy's implementer competence (Subarsono, 2021).

3. Disposition

In simple terms, the disposition can be interpreted as the policy implementer's tendency to implement the policy. Disposition includes commitment and honesty in the implementation (Setyati & Utomo, 2015). Based on the interview, according to the **SIGANISHUT** manager's observations, the administrator strongly supports the implementation of this policy. Administrators show responsibility in translating the MoEF Regulation No. 8 of 2021 and were responsive to any complaints/obstacles related to using the SIGANISHUT. This was proven in help desk email conversations which were also routinely checked by the SPIP Team (internal auditor) every 3 months.

The SIGANISHUT manager also said that the administrator demonstrated initiatives related to this policy, such as proposing the design concept of the SIGANISHUT website layout, the concept of public information, and the concept of the SIGANISHUT tagline and logo. The goal was that the SIGANISHUT users could more easily recognize, understand, and be interested in the existence of the SIGANISHUT. From these statements and evidence, it can be concluded that the disposition in the SIGANISHUT already running well.

In implementing the policy, the implementer (refers to the manager and administrator) plays a vital role in ensuring the success of the policy implementation. This is in line with what was conveyed by Yalia (2014) in his research that if the implementers have a positive attitude tendency in providing support for policy implementation, there is a high possibility that policy implementation will be carried out according to the initial decision

4. Bureaucracy Structure

The organizational structure in charge of implementing policies significantly influences policy implementation (Subarsono, 2021). In Edwards' theory of policy implementation, even though policy implementers already have the desire and are supported by sources to do so, in implementing these policies, they can still be hampered by the organizational structures in which they carry out these activities (Winarno, 2007). The term "bureaucratic structure" in this theory refers to these organizational structures. There are two characteristics emphasized here which are Standard Operating Procedure (SOP) and fragmentation.

According to Winarno (2005), Standard operational procedure (SOP) is a development of internal demands for the certainty of time, resources, and uniformity needs in a complex and extensive work organization. Meanwhile, fragmentation is the distribution of responsibilities for a policy to several different agencies, which requires coordination (Winarno, 2005). The fragmentation form contained in the implementation of the MoEF Regulation No. 8 of 2021 policy is the authority distribution in implementing this policy. The policy implementation of The MoEF Regulation No. 8 of 2021 is carried out by two implementers with different authorities, namely administrators from the Sub-Directorate of Forest Product Administration, Dit. IPHH, and operators from the Production Forest Management office and the company.

The administrator has the authority to handle complaints/problems, provide explanations/solutions related to the implementation of the SIGANISHUT, and coordinate with the SIGANISHUT developers

regarding applications that need repair or improvement. Operators from the Production Forest Management Office (BPHP) have the SIGANISHUT access rights to verify and monitor SIGANISHUT e-services. While the operators from companies have access to propose GANISPH assignments for company purposes.

Based on the research results, it is known that the issuance of the decree and GANISPH assignment cards used to be done manually with the approval of the head of BPHP. This manual process has the potential to be time-consuming and can allow documents to be scattered if archiving is poor. After using the SIGANISHUT, the business process is carried out online, making it easier to track the status of applications and streamline services.

In issuing the decree and GANISPH assignment cards, all BPHPs refer to the Standard Operating Procedure (SOP) for issuing assignment decrees as stated in MoEF regulation No. 8 of 2021 in article 300, paragraph 5. This policy is implemented in the SIGANISHUT by issuing the GANISPH assignment card automatically after 10 working days have passed.

Because the SOP is clearly stated in MoEF Regulation No. 8 of 2021, coordination can run well. This fragmentation does not produce bad consequences that can hinder the process of public service and the concept of information disclosure that is carried out.

C. Public Information Transparency and Public Services on the SIGANISHUT

The SIGANISHUT, as a means of the embodiment of the MoEF Regulation No. 8 of 2021, has been proven to provide bureaucratic services online and public information in real-time. From the observation taken from February to July 2022 (as shown in Figure 7), it is known that all features of bureaucratic services and the public information section functioned. Several errors occurred since so many users accessed this information system, but they were manageable. As a result, if the SIGANISHUT

keyword is typed on the Google search site, it will link to the official site on Google's first page without the help of robots. This implies that if the information system is considered good, users will continue to use it.

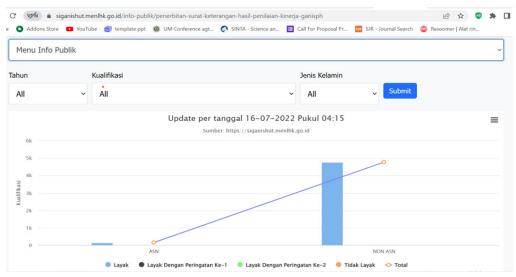
The features for issuing GANISPH registers, GANISPH assignments, GANISPH searches, and checking GANISPH assignments on the official SIGANISHUT website generally work well with information on updates per date and time of access. According to the administrator, this e-service was temporarily deactivated for approximately 1x 24 hours in 2021 due to adding major maintenance features, while minor problems can be repaired directly without deactivating the site (as shown in Figure 8).

Figure 7, Figure 8 and Figure 9 show the disclosure of public information and electronic services carried out by the Sub-Directorate of Forest Product Administration, Dit. IPHH. Figure 8 shows the features of the GANISPH service, which can be done paperless, and Figure

9 shows information related to GANISPH, who has been on duty or who has not been on duty, and the total qualification data.

In analyzing the application of a policy which in this case is manifested in an information system, it is essential also to know the views of regular SIGANISHUT users, namely GANISPH, regarding its use. Therefore a minisurvey was conducted, which was attended by 36 respondents, with the percentage of female respondents being 16.7% and male respondents being 83.3%.

Respondents can be categorized as secondary users of SIGANISHUT because they have access to SIGANISHUT related to GANISPH e-services (Doll & Torkzadeh, 1988). They were identified as coming from the private sector (companies) and the government (KLHK/BPHP). Based on the age range, most of The SIGANISHUT users in this minisurvey were dominated by workers from the Z generation and the Y generation at 55.8%. The



Source: https://siganishut.menlhk.go.id, accessed 16 July 2022

Figure 7. One of The SIGANISHUT' public info display

Remarks:

Tahun: Year Kualifikasi: Qualification Jenis kelamin: Sex

Update per tanggal: Update per date

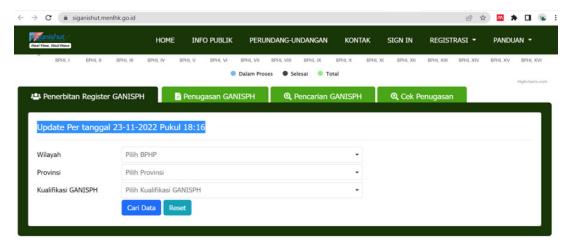
Pukul: Time ASN: Civil Servants

NON ASN: Non Civil Servants

Layak: Eligible

Layak dengan peringatan ke-1: Eligible with first warning Layak dengan peringatan ke-2: Eligible with second warning Tidak layak: Not Eligible

Total: Total



Source: https://siganishut.menlhk.go.id/, accessed 23 November 2022

Figure 8. Home display on the official website of the SIGANISHUT

Remarks:

Penerbitan Register GANISPH: Issuance of GANISPH Register

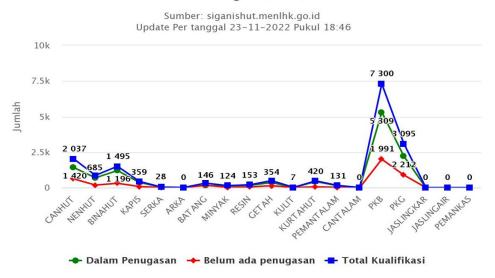
Penuugasan GANISPH: The Assignment of GANISPH

Pencarian GANISPH: Search for GANISPH Cek Penugasan: Search for Assignment Update Per tanggal: Updated as of Date Wilayah: Region Pilih BPHP: Select BPHP Provinsi: Province

Kulaifikasi GANISPH: GANISPH Qualification Pilih Kualifikasi GANISPH: Select GANISPH

Qualification

Perbandingan GANISPH



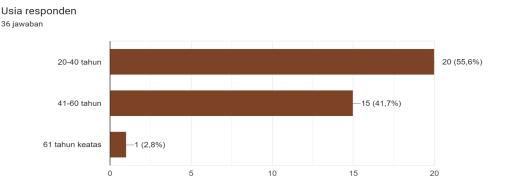
Source: https://siganishut.menlhk.go.id/, accessed 23 November 2022

Figure 9. Real-Time data related to GANISPH on the SIGANISHUT

Remarks:

Perbandingan GANISPH: Comparison of GANISPH Sumber: Source
Update per tanggal: Updated as of Date
Pukul: Time
Jumlah: Amount

Dalam penugasan: Assigned
Belum ada penugasan: No assignment
Total kualifikasi: Total Qualification
(CANHUT,NENHUT,BINAHUT, KAPIS, etc are
abbreviations for specific types of GANISHUT
assignments)



Source: primary data

Figure 10. The respondent's age in a mini survey related to the SIGANISHUT user's perception of the benefit of SIGANISHUT

Z generation is the generation that was born between 1995-2010, while the Y generation is the generation that was born between 1980-1995 (Bencsik, A., B.; Horváth-Csikós, G.; Juhász, 2016).

According to most users (as shown in Figure 10), The SIGANISHUT has relatively easy access to use and can assist with reporting and implementing GANISPH activities. The other three respondents considered it difficult due to the age factor and linking site accessibility as difficult to access because the user experienced an unstable internet network. The advantage of the Z and Y generations, compared to the baby boomer generation, is that they grew up in the digital era, making it easier for them to adapt to technology (Taylor, 2018; Heuss, S.C., Zimmerli, L., Schneeberger, 2022). However, the SIGANISHUT users think that the use of SIGANISHUT still needs to be enhanced, so they suggest increasing the socialization activities so that The SIGANISHUT users' comprehension can be improved..

IV. CONCLUSION

As a tangible manifestation of the MoEF regulation policy No. 8 of 2021, SIGANISHUT has been providing online-based public services and consistently presenting public information in real-time since its launch in 2020. The SIGANISHUT can simplify the bureaucracy

because it cuts time with the digital service by providing electronic services such as GANISPH e-register, e-assignment, e-placement, e-report, and e-money.

In policy implementation, the communication process is carried out clearly. Policy implementers understand what will be conveyed to the target users. They use twoway communication channels through faceto-face socialization and help desks. Faceto-face socialization is chosen so that policy implementers can assess the comprehension and interest of users so that it can be used as evaluation material in delivering messages in the future. However, due to the pandemic and limited budget funds, face-to-face socialization activities were halted and resumed in 2022. However, it is still necessary to increase the budget for policy socialization in the field because the users still need it.

For the disposition point of policy implementers, they have shown responsibility in translating MoEF regulation No. 8 of 2021 and are responsive to all complaints/obstacles related to using the SIGANISHUT. In terms of the bureaucratic structure, it is known that with the current structure, policy implementation is based on the SOPs contained in MoEF regulation No. 8 of 2021 and the fragmentation of responsibilities from policy implementers can be well coordinated.

In Dit. IPHH, the resources to strengthen the implementation of current policies are human resources, technology facilities, and financial resources. However, it was deemed necessary to add more human resources to assist the administrator's duties, which had only been held by one person. In its bureaucratic structure, MoEF regulation No. 8 of 2021 through the SIGANISHUT has been implemented by dividing the distribution of responsibility for policy implementation to the Production Forest Management Unit (BPHP) with reference to the applicable SOP.

Dit. IPHH has a major role in supporting the successful implementation of public disclosure policies as mandated to manage the SIGANISHUT. Full support regarding priorities and policy directions for developing information systems is crucial for implementing the SIGANISHUT public information and service program. Through the appropriate support and measurable policies and regulations, it is hoped that the legislative mandate regarding public information disclosure can be carried out efficiently and adequately.

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REFERENCES

- Acosta, R.T.; Rodney, K. P. (2006). Sustainable Forest Management and Human Resources Development In Indonesia. http://www.itto.int/files/itto_project_db_input/2383/Ex-post/PD89-90(F)_Ex-post Evaluation Report_39RFM-3. pdf.
- Adelia, T., Wulan, R. R., & Nurfebiaraning, S. (2016). Pengaruh Kualitas Pelayanan E-government

- Kantor Imigrasi Kelas Ii Karawang Terhadap Kepuasan Pengguna Jasa Keimigrasian Melalui Internet | P | eProceedings of Management. E-Proceeding of Management. https://openlibrarypublications.telkomuniversity. ac.id/index.php/management/article/view/2215
- Ahmad, J. (2021). Adopting Incremental Innovation Approaches in the Digitalization of Village Government Services. *JKAP (Jurnal Kebijakan dan Administrasi Publik)*, 24(2), 145-162. doi://10.22146/jkap.54028.
- Aritonang, A. I. (2011). Kebijakan Komunikasi di Indonesia: Gambaran Implementasi UU No.14/2008 tentang Keterbukaan Informasi Publik. *Jurnal Komunikasi*, 1(3), 261–286.
- Bencsik, A., B.; Horváth-Csikós, G.; Juhász, T. (2016). Y and Z Generations at Workplaces. *Journal of Competitiveness*, 8(3), 90–160. doi://10.7441/joc.2016.03.06.
- Doll, W. J., & Torkzadeh, G. (1988). The Measurement of End-User Computing Satisfaction. MIS Quarterly, 12, 259–274.
- Dunn, W. N. (1994). Public Policy Analysis: An Introduction. Prentice-Hall International.
- Handayani, P. W., & Kardia, N. P. (2010). Analisis Tingkat Implementasi E-Government Pada Level Kementerian Indonesia Berdasarkan Framework Deloitte & Touche. *Jurnal Sistem Informasi*, 6(2), 134–139.
- Heuss, S.C.; Zimmerli, L.; Schneeberger, A. R. (2022). How do physicians from two generations communicate with each other? *Cogent Social Sciences*, 8, 1–18. doi://10.1080/23311886.2022.2095745.
- Ihlen, Øyvind, Just, S.N., Kjeldsen, J.E., Mølster, R., Offerdal, T.S., Rasmussen, J., Skogerbø, E. (2022). Transparency beyond information disclosure: strategies of the Scandinavian public health authorities during the COVID-19 pandemic. *Journal of Risk Research*, 1–14. doi:/ /10.1080/13669877.2022.2077416.
- Nupikso, D. (2015). Implementasi Keterbukaan Informasi Publik dalam Website Pemerintah Daerah. *Jurnal Ilmu Pengetahuan dan Teknologi Komunikasi, 17*(2), 113–128.
- Nur, E. (2014). Penerapan E-Government Publik Pada Setiap SKPD Berbasis Pelayanan di Kota Palu. *Jurnal Penelitian Komunikasi dan Opini Publik*, 18(3), 265–279.
- Nursalam. (2010). Kebijakan Pelestarian Sumber Daya Hutan dalam Rangka Pembangunan Berkelanjutan. *Jurnal Geografi Gea*, 10(1), 1–14. doi://10.17509/gea.v10i1.1660.

- Soetaryono, R. (2000). Landasan Hukum dan Kebijakan bagi Pengelolaan Hutan Lestari dan Berkelanjutan di Indonesia. Pembenahan Sistem Pengelolaan Hutan Alam Produksi dan Pemulihan Fungsi Hutan Melalui Upaya Reboisasi dan Konservasi Hutan di Indonesia, 167.
- Subarsono, A. G. (2021). *Analisis Kebijakan Publik* (X). Pustaka Pelajar.
- Taylor, J. (2018). From Boomers To Gen Z: How Different Generations Adapt And React To New Trends And Technologies. Epsilon.Com. https://www.epsilon.com/apac/insights/blog/fromboomers-to-gen-z.
- Tim Komunikasi Pemerintah Kemkominfo. (2016). *Keterbukaan Informasi Publik Menjamin Kualitas Hidup yang Lebih Baik*. Kemkominfo.Go.Id. https://www.kominfo.go.id/index.php/content/detail/8076/keterbukaan-informasi-publik-menjamin-kualitas-hidup-yang-lebih-baik/0/artikel_gpr.
- Winarno, B. (2007). *Kebijakan Publik Teori & Praktek*. Media Pressindo.