

Policy of providing open-access e-books at LIPI during the Covid-19 pandemic

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Abstract

The policy of providing open-access e-books is one form of information disclosure carried out by LIPI in building a public facility in the form of a credible and innovative source of scientific literacy, particularly related to scientific publications of publicly funded research results. This research analyzed the policy of providing LIPI e-books in 2020-2021 in the Covid-19 pandemic. This study used a qualitative approach with a case study method. Data collection was carried out in May-June 2021 through in-depth interviews with two informants, a literature review, and observation of document searches related to the policy of providing open-access e-books at LIPI Press. The results indicated that the policy was fulfilled by implementing the Local Knowledge Acquisition Program and the Open Monograph Press (OMP) electronic publishing system. This policy has effectively increased the visibility, accessibility, and usefulness of scientific books during the Covid-19 pandemic. This can be seen from the increasing number of access to LIPI Press e-books provided through OMP throughout 2020-2021. However, the lack of understanding of open access among the public is a challenge in providing e-books. At the same time, the limited number of human resources who handle the electronic publishing information technology system is a fundamental problem in developing an e-book publishing system. This study concludes that the basis and implementation of the policy for providing open-access e-books are feasible to be maintained and improved, especially as a form of accountability for public funds used for public knowledge sources.

Keywords: Access policy; E-books; Scientific publication; Open access; Covid-19 pandemic

Kebijakan penyediaan e-book akses terbuka di LIPI selama pandemi Covid-19

Abstrak

Kebijakan penyediaan e-book open access merupakan salah satu bentuk keterbukaan informasi yang dilakukan LIPI dalam membangun sebuah fasilitas publik berupa sumber literasi sains yang kredibel dan inovatif, khususnya terkait dengan publikasi ilmiah hasil penelitian yang didanai publik. Penelitian ini bertujuan menganalisis kebijakan penyediaan e-book LIPI pada tahun 2020-2021 selama pandemi Covid-19. Penelitian ini menggunakan pendekatan kualitatif dengan metode studi kasus. Pengumpulan data dilakukan pada Mei-Juni 2021 melalui wawancara mendalam dengan dua orang informan, tinjauan literatur, dan observasi penelusuran dokumen terkait kebijakan penyediaan e-book open access di LIPI Press. Hasil penelitian ini menunjukkan bahwa kebijakan tersebut dilakukan melalui penyelenggaraan Program Akuisisi Pengetahuan Lokal dan penerapan sistem penerbitan elektronik Open Monograph Press (OMP). Kebijakan tersebut terbukti efektif dalam meningkatkan visibilitas, aksesibilitas, serta kebermanfaatan buku ilmiah di masa pandemi Covid-19. Hal ini terlihat dari meningkatnya jumlah pengakses e-book yang disediakan melalui OMP LIPI Press sepanjang tahun 2020-2021. Akan tetapi, kurangnya pemahaman open access di masyarakat menjadi tantangan dalam penyediaan e-book, sementara keterbatasan jumlah sumber daya manusia yang menangani sistem teknologi informasi penerbitan elektronik menjadi persoalan mendasar dalam mengembangkan sistem penerbitan e-book. Simpulan penelitian ini adalah bahwa landasan dan implementasi kebijakan penyediaan e-book dengan open access layak untuk dipertahankan dan ditingkatkan, khususnya sebagai bentuk pertanggungjawaban dana publik yang digunakan untuk sumber pengetahuan publik.

Kata Kunci: Kebijakan akses; E-book; Publikasi ilmiah; Open access; Pandemi Covid-19

INTRODUCTION

The policy of providing open-access e-books is one form of public information disclosure carried out by LIPI in building public facilities in the form of credible and innovative literacy sources, particularly related to various scientific publications of publicly funded research results. In this case, publicly funded scientific publications are seen as public goods, such as laws or government reports available for free access via the internet (Björk, 2017). Based on the case study, this study will analyze the policy of providing LIPI Press e-books in 2020-2021.

This is deemed necessary considering that in today's era of openness and abundance of information, people can easily and quickly obtain, produce, and disseminate information. Then how does implementing this policy answer the public's needs, especially when free access to credible content has increased since the emergence of the Covid-19 Pandemic? The reason is that the Covid-19 pandemic has "forced" the acceleration of the implementation of public information disclosure, especially related to the availability of access to scientific publications of research results (Taylor, 2020).

In line with that, Slim (2020) states that the increase in the search for scientific publications during the Covid-19 pandemic is new in scientific communication because it has never happened before. In addition, during the pandemic, the attention of most of the media also turned to medical professionals to report developments related to the Covid-19 pandemic. Likewise, social media networks rife with information related to the Covid-19 pandemic underlie the public's view of information that may be only partially true.

For this reason, Škorić, Glasnović, & Petrak (2020) recommend that the scientific community play an active role while remaining careful about the sources and interpretation of scientific facts in the public sphere. In line with that, Mukhroman and Gumelar (2022) argue that the dissemination of information quickly and in a chain through social media related to issues that are considered important in warding off hoaxes needs to be carried out by the authorities. Especially the government and local governments with support from various parties.

It is certainly a challenge for information institutions in publishing and libraries. The increasing public need for credible, easy, and quickly accessible sources of information during a pandemic requires information institutions to be present to show their existence. In particular, academic libraries are now under increasing pressure to demonstrate their contribution to achieving institutional goals and student success before and during the pandemic (Prasetya & Rahmi, 2022).

One of them is opening as many publications and research data as possible in an open-access way to meet the public's need for access to credible and innovative information. Studies related to the policy of providing and utilizing open access-based e-books have been discussed from various perspectives. The most studied aspect is using e-books and open access in libraries and academic environments.

Among them, Grenina (2012) discusses the advantages and disadvantages of e-book usage policies in Latvia based on the theory of diffusion of innovations. The results show different expectations and requirements of e-books for different user groups. These differences are mainly based

on age and level of computer skills and the incompatibility of e-books for long-term reading.

Furthermore, Walters (2013) reviews how the policy of restricting access to the use of e-books affects library lending for e-book readers with mobile devices. According to him, the most fundamental problems in the restrictive licensing terms are proprietary software and file formats, digital rights management (DRM), and the single-user business model adopted by many e-book vendors. However, this restrictive policy also affects library circulation and interlibrary loans: restrictions on the number and type of users. Besides other restrictions on circulation, restrictions on the use of e-books for course reserve and interlibrary loan.

Then, Yusnimar (2014) conducted a study to determine the attitudes of university library users in Jakarta towards e-books. His research found that many students still do not know the publishers that provide e-books. This is in line with the purpose of this research, especially to determine how LIPI's efforts are in promoting their policies in providing e-books with open access.

Meanwhile, several other articles also researched the policy of providing open-access e-books. Among them is Bull (2016) who reveals that the impact of open access presents both threats and opportunities for academic associations. Therefore, academic associations must dare to use a combination of expertise, prestige, and experience in publishing to ensure their future in facilitating researcher interaction and knowledge production.

Furthermore, Vrana (2014) conducted a study on students at the Faculty of Humanities and Social Sciences in Zagreb,

Croatia, using digital information resources. This study shows the tendency to choose digital information sources, maturity in assessing the quality of digital information sources, and maturity in distinguishing the good and bad sides of digital information sources. In addition, open-access information sources can serve as models for policymakers who seek credible information about preferences, including students' experience in using digital content for education. In addition, students' preferences and experiences can also be integrated into selecting reading materials for courses at FHSS because student preferences are more clearly identified.

Then Slim (2020) discusses the main obstacles in accessing electronic resources experienced by various stakeholders, writers, publishers, consumers, and librarians. Meanwhile, Sahidi (2017) reviews the role of open-access information policies and librarian relations in building scientific communication. The results show that the open access movement that has been echoed can open up opportunities for the public to produce new works that are useful for developing science and technology in Indonesia in the future.

Subsequent research from Fuchs and Sandoval (2013) seeks to demonstrate the limits of contemporary perspectives on open access for the publishing industry, policymakers, and trade unions. In this regard, fostering and supporting the public on the open-access diamond model is emphasized. In addition, this article also seeks to spark new debates and invite further reflection on open access for academics, policymakers, publishers, publishing workers, trade unions, open-access publishing associations, editors, and librarians.

Based on the results of various literature reviews, research discussing policies and the provision of open-access e-books from the book publisher's perspective, as carried out by LIPI Press, has received little attention. Therefore, this study seeks to analyze the basis and implementation of policies for providing e-books with open access with case studies conducted by LIPI Press in 2020-2021. In addition, this study also aimed to, firstly, determine the policy basis for providing LIPI Press e-book collections with open access. Second, review the visibility and accessibility of e-books distributed through LIPI's public channels, especially during the pandemic; third, find out the challenges and obstacles in providing open-access e-books.

RESEARCH METHODS

This study used a qualitative approach with case study research methods. A case study is a study that explores a case in depth, collecting complete information using various data collection procedures based on a predetermined time. It can include events, activities, processes, and programs (Batubara, 2017).

The researcher chose the case study because it did not cost money and time, mainly because the research subject was focused on the leading manager at LIPI Press to analyze the policy of providing LIPI e-books in 2020-2022. The data was collected in May-June 2021 through in-depth interviews, a literature study, and observation. The data source is primary data from in-depth interviews with two informants determined by purposive sampling technique.

In this case, the informant is the leader and coordinator of content packaging in making policies for providing open-access

e-books at LIPI Press. Data were also obtained from the results of participatory observation of researchers through involvement in publishing activities at LIPI Press. Meanwhile, secondary data sources were obtained through a literature review of previous research results and various documents and regulations related to the policy of providing open-access e-books at LIPI Press.

Data analysis was conducted using coding techniques to get an overview of the facts obtained, including open coding. This is to identify various categories, axial coding to connect each category, and selective coding to systematically select core or main categories so that they can be analyzed and described to answer research problems and conclusions.

RESULTS AND DISCUSSION

The provision of open-access e-books by the Indonesian Institute of Sciences (LIPI) started in 2007 through www.buku-e.lipi.go.id (LIPI Press, 2021). The effort to provide e-books was based on the concerns of the limited number of providers and readers of scientific books in Indonesia, especially the need for scientific reference sources for scientific activities and academic learning.

In other words, the need for scientific references is very high, but the support of (financial) resources to access the primary sources of information is very inadequate. On the other hand, there are potential providers of information sources from teachers, lecturers, and researchers. However, due to inadequate infrastructure support, potential users have difficulties accessing their work. Therefore, LIPI Press provided open-access books through the Open Monograph Press (OMP) electronic publishing system.

Open Access (OA) is an international movement that started in the early 2000s and aimed to increase free and open online access to academic information, such as publications and data (Johnson, 2019; Ross, 2014; Slim, 2020). Until now, the open access movement has continued to grow. Even in 2018 in Europe, Plan S was launched, which stipulated that all scientific publications financed by public funding bodies, starting in 2021, must be published on an open-access platform or immediately available to the public through open-access repositories without an embargo system (Johnson, 2019). Plan S is an initiative of the Coalitions, an international research funding consortium for open-access publishing, supported by Science Europe, the funder, the European Research Council, and the European Commission.

In the application of open access, there are several models: First, the Gold Open Access, which means that publications can be freely accessed online from all over the world, while the publishing costs are borne by the authors or funders (Slim, 2020; (Ule, 2020)), examples can be found on the DOAJ and DOAB websites. Second, the Green Open Access this model allows publications published with a subscription access system. However, the database of pre-published versions is also available in the institution's Open Access repository affiliated with the author (Cope & Kalantzis, 2014).

Third, Delayed Open Access means that publications will be available for free after a certain period. Cope and Kalantzis (2014) claim that apart from being a hindrance to the readers, this model may also need updating due to the speed of scientific development. Fourth, Hybrid Open Access means authors can pay an

additional fee for their articles to become Open access. Besides, there is also the "Selected" model, which comprises "publications available free of charge to certain groups of people, and some are only available for others for a fee". The "hybrid" or "selected" model actually limits access because it only offers a partial solution and does not achieve the primary goal of open access, namely direct and free access for all.

Accordingly, Fuchs and Sandoval (2013) also say that a publication is defined as 'Open Access' when there are no financial, legal, or technical barriers to accessing it. According to a legal agreement, anyone can read, download, copy, distribute, print, or use it for education or other means. In other words, open access is a publishing model for scientific communication that makes research information available to readers at no cost, in contrast to the traditional subscription model, where readers have to pay to access scientific information (usually through a library).

One of the essential advantages of open access is that it increases the visibility and reuse of academic research results. In this regard, the principles of open access are regulated in the Berlin Declaration signed by many international organizations for academic research, including all universities and research organizations in the Netherlands on open access to Knowledge in Science and Humanities (Bull, 2016; Eve, 2017; Fuchs & Sandoval, 2013). Meanwhile, Björk (2017) said that open access accelerates the creation and broadens the dissemination of scientific knowledge. In terms of economic efficiency, open access has the potential to reduce scientific communication costs significantly.

In this regard, the policy basis for providing open-access e-books at LIPI, which began in 2020, is implemented through the Local Knowledge Acquisition Program. In its implementation, it is carried out by the Center for Media and Reproduction or known as LIPI Press, as explained by one of the informants,

"The policy of the Head of LIPI at the end of 2019 mandated that the Local Knowledge Acquisition Program be carried out in 2020. This makes LIPI Press have to create a system that can accommodate the process of acquiring knowledge from knowledge owners, effective and efficient packaging of knowledge, and dissemination through the public domain" (D. E. I. Ringga, Interviewed, June 21, 2021).

In this case, the policy of providing open-access e-books is one of LIPI's efforts to document and disseminate various knowledge of research results and local knowledge in the form of e-books. The policy is contained in the Head of LIPI Regulation No. 11 of 2020 concerning the Local Knowledge Program (LIPI, 2020), which states that the provision of e-books through the Local Knowledge Acquisition Program is one of LIPI's contributions to participate in the intellectual life of the nation as mandated in the preamble of the 1945 Constitution. In addition, it also mentioned that LIPI has a very strategic role in supporting government programs in developing intelligent and superior Indonesian Human Resources (HR) through the provision of credible and innovative information, especially information containing science and technology.

The program mandates LIPI Press as the executor to create a credible and innovative publication management

ecosystem by accommodating the knowledge acquisition process from the community as the knowledge owner. This knowledge is then converted and packaged into an effective and efficient publication and disseminated through public channels managed by LIPI Press. Based on this policy, LIPI Press uses an open-access scheme for its publications so that publications containing various local knowledge and research results can be accessed by more people and bring massive benefits. This is known from one of the informants who said,

"For this reason, LIPI Press uses an open access scheme for publications so that more people can access local knowledge, which brings more massive benefits. It is an indicator of the acquisition program's success because it measures the output (the quantity acquired) and the outcome (the quantity of the acquisition used by the community)" (D. E. I. Ringga, Interviewed, June 21, 2021).

In this case, LIPI Press, as a scientific publisher, performs electronic-based book publishing services (e-service publishing) with open access. This ensures the public interest in obtaining and accessing books of publicly funded research results. Efforts to provide open-access e-books are also intended so that LIPI Press publications can be disseminated, gain international visibility, and are accessible to everyone worldwide, regardless of regional boundaries.

The e-books published by LIPI Press with open access are available in PDF format, and everyone from all over the world can assess them through the LIPI Press website. These books are distributed under the CC-BY-NC-ND license, and the copyright remains with the authors. Thus,

the public can read, share, download, store and distribute copies of published e-books without permission or payment to the publisher or the author.

As a scientific publisher, LIPI Press serves the interests of scientists and the general public who wish to publish their work in open-access book form. Each book will be published after going through a rigorous peer review process. In this case, every book manuscript that will be published will go through a peer review process first by experts in the field and by publishing scientific journal publications in general. Simply put, LIPI Press provides a digital platform for publishing and disseminating scientific works in the form of books. Through this effort, not only writers will benefit but also the public in obtaining knowledge about the latest scientific information or events in various fields of science, technology, and social and humanities.

The LIPI Press organization was formed based on LIPI Regulation Number 6 of 2020 concerning the Organization and Work Procedure of the Media and Reproduction Center (LIPI, 2020). The regulation stated that administratively and technically, LIPI Press is one of the work units within LIPI with duties and functions to carry out planning, acquisition, packaging, and dissemination of scientific information on research results and local knowledge in the form of books, journals, and multimedia. Based on this regulation, LIPI Press has the responsibility and commitment to ensure the quality, accessibility, and visibility of the publications of research results by expanding the distribution and dissemination network through public channels that can be accessed freely (free access).

Departing from this policy, in 2020, LIPI Press began implementing changes to publishing services. LIPI Press no longer prints its published books but only publishes them in an electronic version (e-book). In addition, e-books are prohibited from being traded but are freely opened to the public through the LIPI Press website. This transformation changed the previous LIPI Press policy, where books were published in printed versions and sold to the public through online and offline (traditional) bookstores. Even in the previous policy, LIPI Press set a fee for authors who wanted to publish their books, especially those who were not from LIPI. The income from the book's sale and the author's fees were included in the non-tax state revenue of LIPI Press.

In addition to changes in the form of published services and products, LIPI Press' organization and business processes have also changed. This is due to a reorganization at LIPI, which combines two work units with the same tasks and functions. The merging of the two work units not only makes LIPI Press' duties and functions bigger but also in terms of human resources and budget.

In line with these changes, the duties and functions of LIPI Press are to publish books and journals and produce multimedia publications, such as documentaries and animations. LIPI Press no longer only serves the needs of researchers to publish their work but also the wider community, students, scholars, lecturers, and even the general public who are involved in various activities in the community. In other words, those who can publish their books to LIPI Press are not only LIPI employees but all Indonesian people.

In fact, according to LIPI Press policy in 2020, all book authors or film creators whose works are published will receive compensation in monetary incentives. Thus, it will be easy for the public to publish and obtain information related to research results and local knowledge in e-books. The availability of open-access e-books is expected to bridge writers and readers to interact and collaborate in producing new books

Through this new policy, prospective information providers, writers, and research institutions are motivated and moved to disseminate their information and knowledge so that a wider audience can use it. As a result, it is easier for the public to obtain credible sources of scientific information. LIPI Press publishing service innovation is carried out to build an open-access-based scientific publication ecosystem.

Effectively, this innovation began in 2019 by applying the OMP, an e-book publishing system (e-service publishing) that could accommodate the open access policy at LIPI Press. One of the informants in this study explained,

"In addition to developing innovations in online scientific publishing services, LIPI Press also applies an open-source system based on OMP. This system is capable of accommodating publicly accessible publishing work flows. Through OMP, published manuscripts can be indexed by Google Scholar, allowing wider citation. It can also increase indexation and institutional citations" (P. Sasiwi, Interviewed, June 21, 2021).

The OMP system can accommodate online publishing workflows, from

submission, verification, review, copyediting, layout, cover design, and proofreading to publishing in an online catalog that can be directly accessed by the public (Mahelingga, 2020). Another advantage is that all scientific publishing editorial activities are recorded in real-time in the OMP system (Figure 1).

As stated by the following informant, "To disseminate knowledge to the general public, LIPI Press opens access to all publications on the LIPI Press website. Not only can published manuscripts be viewed freely, but the owner can also see the progress of the manuscript's journey of the manuscript. It is because the OMP system can accommodate from the entry of the manuscript to publication which the public can access" (P. Sasiwi, Interviewed, June 21, 2021).

In this case, one of the goals of LIPI Press in implementing an electronic-based publishing system is to increase the accountability and professionalism of the scientific book publishing process (LIPI Press, 2020). In addition, what is no less important is that it is intended to increase the accessibility and visibility of research books published by LIPI Press. Through this effort, the dissemination of publications by research institutes becomes wider, leading to the citation of scientific books that can increase authors' indexation. This can occur because the OMP system allows books published in open access to be indexed by Google Scholar and other citation institutions (Mahelingga, 2020). As a result, it can guarantee the public interest in obtaining or accessing publicly funded research results (Fuchs & Sandoval, 2013).

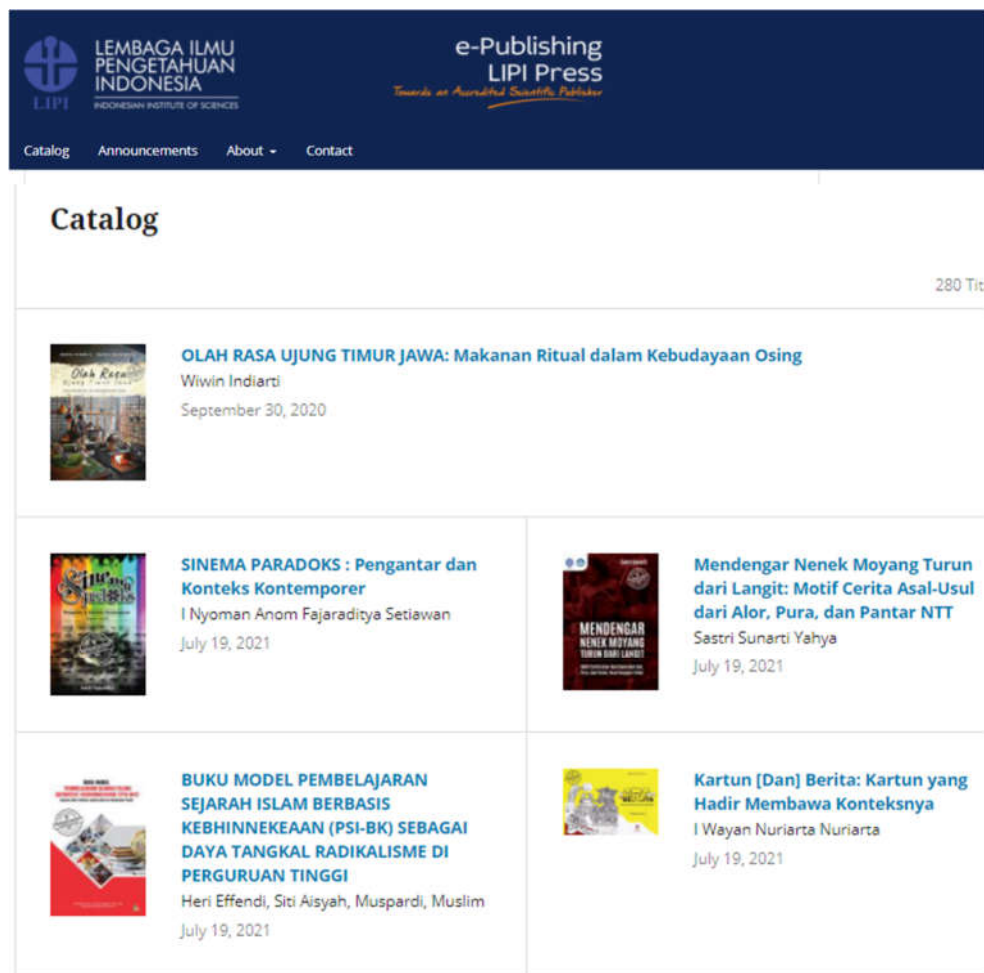


Figure 1. Display of the Open Monograph Press (OMP) catalog menu
Source: LIPI Press's OMP, 2020

Until now, the publication of LIPI Press' e-books through OMP has reached 296 titles, and all of them can be accessed freely (free access) (Figure 1). However, in addition to e-books, LIPI Press also provides literacy resources in the form of video documentaries, animations, and innovative creative documentation that contains various information on research results and local knowledge, which the public can freely access through the LIPI Press website (Figure 2). The visibility and accessibility of e-books are one of the efforts to ensure and guarantee that the public can know, find, and access them. Various regulations to increase the productivity of scientific publications realized by implementing open access also see how

useful they are for the public (Fuchs & Sandoval, 2013).

In this case, Hutchinson (2021) said that visibility means the visibility or clarity of activity to make it stand out from the rest. Likewise, Rahmawan, Mahameruaji, and Janitra (2020) emphasize visibility as something related to popularity. Meanwhile, Yanti and Krismayani (2018) understand accessibility as the ease with which a person reaches an object. In this case, accessibility means easy to reach or attain.

This opinion is in line with Reitz (2014) who says accessibility is the ease with which a person gains access to the library system to use resources and obtain the information they need. Based on this understanding, the following will describe various factors and

efforts made by LIPI Press to increase the visibility and accessibility of books published and distributed in open access. First, some of this information was obtained based on the results of interviews and observations of the authors, both through documents, websites, and LIPI Press social media, including multiplying publications that enter the indexing engine. Google Scholar, PKP Index, and Dimensions have indexed LIPI Press. LIPI Press is starting to explore DOAB indexation as a pioneering path toward Scopus indexation. Second, updating the contents of the book catalog and uploading the latest publications into the OMP system (e-service.lipi-press.lipi.go.id).

Third, improving socialization activities for authors to complete filling in metadata as

one of the publishing requirements so that queries on indexing engines will be more diverse. Fourth, improve the quality of social media performance used to disseminate publications like Facebook, Instagram, and Twitter. Fifth, improve server stability so the website can always be accessed anytime.

These efforts have increased the visibility and accessibility of LIPI Press publications on the internet. This can be seen from the increase in access that began in March 2020, when the new Covid-19 pandemic emerged, after which the average increase reached hundreds of accesses per day (Figure 2) when compared with the journal accreditation standard, which is $50 <$ visits per day, this figure is certainly far beyond (LIPI Press, 2021).

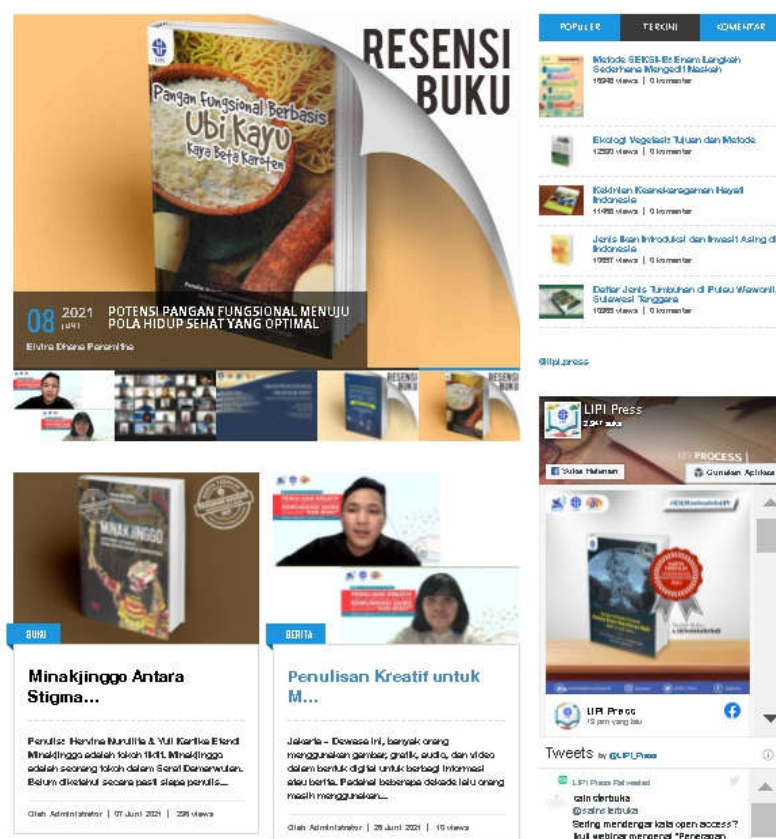


Figure 2. LIPI Press website shows e-books and various information on activities

Source: LIPI Press, 2021

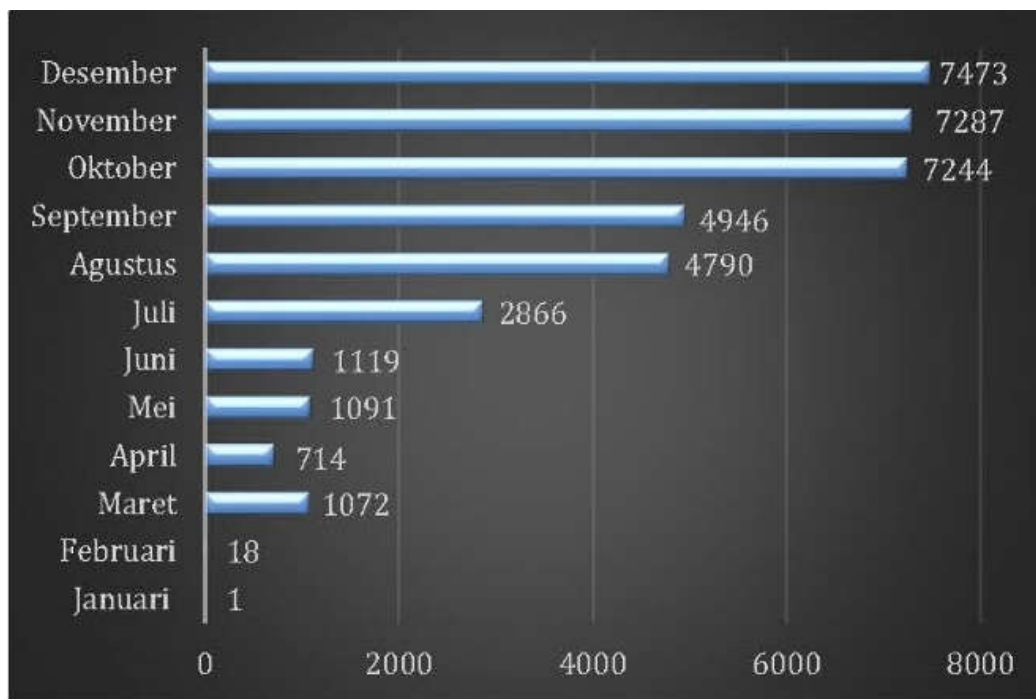


Figure 3. Improvements of e-book access in 2020.

Source: LIPI Press, 2021

In Figure 3, it can be seen that there has been an increase in the number of access to LIPI Press e-books, especially starting from March 2021. In addition, to promote and disseminate publications, LIPI Press is also trying to reach various groups, not only academics but also young people. Therefore, since 2021 LIPI Press has started to promote through more diverse social media applications, not only Facebook, Instagram, and Twitter, but also those currently being loved by various groups, such as podcasts and TikTok (Figure 4).

Through promotions on various social media, LIPI Press hopes that the dissemination of their publications can be broader to reach all circles. The promotion and dissemination effort is a success indicator of the local knowledge acquisition program and the LIPI Press performance; it

not only measures the output in terms of how many books are acquired and published but also the outcome, mainly related to how many books are used by the community. In this case, of course, it is measured by the number of people who access e-books.

Meanwhile, the challenges and obstacles in providing e-books have become the primary concern of LIPI Press. Even though the goal of open access is to facilitate access for the public, in practice, it needs continuous evaluations and improvements to be sustainable. This section will discuss several challenges and obstacles in providing Open Access-based e-books obtained from interviews with leaders and coordinators who handle open-access-based publishing systems at LIPI Press.



Figure 4. LIPI Press social media: podcasts and Instagram to support the visibility of its publications

Source: BRIN Indonesia, 2021

The first challenge was related to the lack of understanding of the Indonesian people, particularly regarding the provision of Open Access e-books published by LIPI Press. For this reason, LIPI Press needs to be more active in dissemination and promotion so that the benefits of this knowledge can reach more audiences. Second, developing systems related to information technology (IT), both websites and CSOs, must be continuously developed. In this regard, LIPI Press has also partnered with various platforms to help increase the distribution of e-books to a global level, one of which is Springer Publishers.

Meanwhile, the first obstacle faced by LIPI Press is the issue of infrastructure and network stability, which is still fluctuating. These server network constraints will mainly affect public access when the website is "down". Second, the limited IT support and human resources at LIPI Press are minimal. Currently, it is handled by one computer administrator, so it becomes less alert when the system is constrained.

Based on this explanation, the various challenges and obstacles faced by LIPI Press were mainly due to IT infrastructure and human resources, which are the main supporters of the open access policy. Therefore, the improvement and sustaina-

bility of the policy for providing open-access e-books requires support, especially for strengthening the facilities and infrastructure that support electronic-based publishing activities (e-service publishing) (LIPI Press, 2021). In addition, the limited number of human resources that focus on handling the system also needs to be improved in competence and number.

The policy of providing open-access e-books by LIPI Press is in line with the government's aspiration to provide quality, affordable, and equitable books, as stated in Law Number 3 of 2017 concerning the Book System. In law, provision is intended as an activity related to providing books (Republik Indonesia, 2017). However, long before the Sisbuk Law was enacted, the government had implemented a policy to provide e-books through the Electronic School Book Program (BSE). The BSE program was inaugurated on August 20, 2008, by President Susilo Bambang Yudhoyono, which aims to provide access to affordable and quality books for all Indonesians by taking advantage of technological developments.

The program, which was implemented through the Ministry of Education and Culture, gradually purchased the copyright for textbook authors from elementary to

high school levels. The purchased books are published through the National Education Network to be accessed by the entire community. In addition to downloading, the public may print, duplicate, and trade, but must comply with the highest retail price determined and listed by the government on each book.

However, it is a shame that the government's efforts in providing e-books are only limited to school textbooks. Non-text books, such as scientific and general works, such as literature, fiction, and others, still need to be fully supported by the government. Even if there is, support for scientific books is only intended to motivate writers by providing incentives to writers through the Textbook Writing Grant and Book Grants program, which is also under the Directorate General of Higher Education, Ministry of Education and Culture. It is in contrast to the BSE Program, which prioritizes the public interest; in this case, students can get books for free. In addition, the Directorate General of Higher Education textbook writing grant program can be said to be less beneficial to the public because the books that received the grant were not accessible to the public. These books have been indirectly funded by public funds and should be accessible to improve the literacy culture of society.

The magnitude and importance of the need for information related to Covid-19 have raised new stakeholders' awareness of the importance of open access to various scientific literature primarily related to Covid-19. As a result, the urge to immediately switch to open access is stronger than ever, especially regarding the need for quick access to medical research related to Covid-19 (Slim, 2020). Meanwhile, the provision of e-books during and after the Covid-19 pandemic by LIPI Press was a

policy expected to meet the public's need for credible, easy, and quickly accessible sources of information. Based on the results of this study, the LIPI Press policy can answer the challenges that arise due to the pandemic that has caused accelerated changes in the management, creation, and utilization of various digital sources. This is evident from the rapid increase in access to LIPI Press e-books throughout 2020 (Figure 3). The policy of providing open-access e-books by LIPI Press has proven significant benefits for the public interest during the pandemic.

This is certainly in line with the open access movement through Plan S, initiated in 2018 by the Coalition in Europe. This movement emphasizes that starting in 2021, all scientific publications resulting from publicly funded research activities must open the broadest possible access to the public without any obstacles. In this case, as a publicly funded government publisher, LIPI Press should not sell its published books. Moreover, most of the authors of books served by LIPI Press are researchers who are government employees, and most of their research activities are funded by public institutions. Even the publishing policy at LIPI Press through the Local Knowledge Acquisition Program provides incentives as compensation to authors whose books are published in electronic versions. Therefore, it is proper for the public to access research books for free and easily.

Meanwhile, the policy of providing open-access e-books implemented by LIPI Press uses the Gold open-access model because e-books provided through LIPI Press' public channels can be accessed and downloaded without restrictions. However, the policy of providing e-books carried out on behalf of the LIPI institution must be refined or simplified. Because, at this time, the provision of LIPI e-books is not only

described in this study. It is also available on websites managed by PDDI-LIPI through www.buku-e.lipi.go.id and <http://ebook3d.pddi.lipi.go.id/>. In this case, it would be better if only one LIPI public channel providing access to e-books to maximize their usefulness. Mainly to increase the number of data and book statistics that are accessed and cited, both for the benefit of the author and LIPI as an institution.

CONCLUSION

The policy of providing e-book collections at LIPI Press is based on efforts to build public facilities in the form of credible and innovative sources of scientific literacy. In practice, the policy is implemented through the Local Knowledge Acquisition Program to ensure the availability of e-books. Then the management of social media and innovation in the form of implementing e-service publishing, namely the Open Monograph Press (OMP), has proven to be effective in increasing the visibility and accessibility of scientific books so that the public can use them during the Covid-19 pandemic. However, the limited number of human resources to handle and develop an information system for publishing e-books at LIPI Press needs attention from the leadership of LIPI to ensure the continuity of providing open-access e-books. Likewise, the public's common understanding of open access becomes a challenge and an opportunity to ensure that efforts to provide open-access e-books can continue to be carried out. Nevertheless, the basis and implementation of the policy for providing e-books with open access is feasible to be maintained and improved, especially as a form of accountability for public funds used for public knowledge sources. Based on this study, it is necessary to conduct further

research on the measurement of index and citation of the publication of scientific books to the authors of books, primarily lecturers and researchers.

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