



Optimization of Research and Development Agency's Research Results into the Form of Development Products

Fatimatuz Zahro Diah Putri Dani¹, Fauziah Khoiriyani²

Research Center for Economic Industry, Service and Trade, National Research and Innovation Agency, Jakarta, Indonesia

ARTICLE INFO

Article history:

Received 16 January 2022

Received in revised 25 March 2022

Accepted 1 April 2022

ABSTRACT

This study aims to map and identified research and the use of research into development of products carried out by the Research and Development Agency (Balitbang) of the Ministry of Religion during 2018-2020. The research method used in this study is a qualitative method. Data collection used document studies as secondary data and in-depth interviews with several stakeholders as primary data. The findings of this study show that the use of the Ministry of Religion's Balitbang research in the form of development products has not been optimal. This is indicated by data that shows that of the 330 studies conducted, 25% of the research has been developed into a product while the remaining 75% has not been utilized into a development product. Five classifications of constraints were also identified in this study, financial, operational, socialization, human resources and policy constraints. Human resource constraints and policy constraints are the factors that hinder the use of research the most. Once these constraints are identified, the study also provides solutions that can be taken by stakeholders to overcome the constraints that hinder the use of research in the form of development products.

Keywords:

Optimization, Product development, Utilization of research

INTRODUCTION

Research is an essential thing for scientific progress and the development of civilization, it is also important for understanding various kinds of problems that surround us every day. In the government sector, research activities are carried out by the Research and Development (R&D) and training Agency (Balitbangdiklat). Balitbangdiklat is the first echelon unit at the Ministry of Religion (Kemenag), that carries out research, development, education, and

¹faza.dpd@gmail.com, ²fauziahkhoiriyani@gmail.com

training in the Religion scope of the Ministry of Religion. Balitbangdiklat has a very strategic role. The research carried out must be the basis for the preparation of various regulations in religious scope at the Ministry of Religion within the Ministry of Religion. In addition to being the basis for policy materials, research results are also able to become guidelines, modules, models, and other products that can be utilized by stakeholders.

Prof. Dr. Lukman Hakim, Head of LIPI 2012 said that a developed and great nation is a nation that utilizes R&D of science and technology as a basis in every decision-making (Sudarmonowati, 2012). Product development of research results is one form of the use of research, where the information produced by research is used to make decisions about policies, advocacy and resource allocation, planning and management, as well as developing and strengthening program systems (Walugembe et al., 2015).

According to (Ness, 2010) there are three basic types of research use: The first type is instrumental use, which refers to the direct application of research to a particular policy decision. This model is the closest model to the decision-making model in which problems are identified, information about possible solutions is collected, then the optimal solution is adopted. The second type is conceptual use, which refers to the broader and longer-term role that research can have in policy makers' understanding of a particular policy issue. The third type is political use, which refers primarily to the use of tactical or symbolic information by policymakers.

At the Ministry of Religion, development activities carried out in Balitbangdiklat refer to the Circular of the Head of the R&D and Training Agency No. 3 of 2015 (Surat Edaran Kepala Badan Litbang dan Diklat No. 3 Tahun 2015) concerning Standardization of R&D Activities in the R&D Environment of the Ministry of Religion of the Republic of Indonesia. Development activities within the Ministry of Religion of the Republic of Indonesia are classified into ten product forms and are regulated in the Decree of the Head of R&D and Training of the Ministry of Religion of the Republic of Indonesia No. 46 of 2017. The product forms are (1) academic texts, (2) regulatory drafts, (3) models, (4) guidelines, (5) modules, (6) monographs, (7) bibliographies, (8) religious reading materials, (9) master copies of manuscripts and (10) documents of religious thought (Table 1).

Based on the 2019 Balitbangdiklat Performance Report, although R&D has produced various research or research-based policy formulations, their use is still not optimal. The effectiveness of the use of R&D results in supporting policy formulation, stated that the R&D effectiveness score of the Ministry of Religion was in the "fairly effective" category with a score of 2.65 (Muawanah & Umi, 2019). Several authors have researched a lot about the effectiveness of the use of research, but few have examined the Government's R&D and Training Agency and what obstacles lead to non-optimal use of research, and what solutions can be provided. In this article, researchers tried to fill the gap in existing research and understand what obstacles underlie the underutilization of research in government R&D.

Table 1. Form of Product Development

No	Product Development	Description
1	Academic Paper	Manuscripts that can be scientifically justified regarding the conception containing the background, purpose of preparation, goals, and scope to be realized, scope, object, or direction of setting the substance of the draft legislation based on the results of certain research or studies carried out carefully, comprehensively, and systematic. Example: Academic Paper on Protection of Religious People.
2	Regulation Draft	A draft containing a written regulation that contains legally binding norms in general and is established or determined by a state institution or authorized official through the procedures stipulated in the Legislation. Example: Draft Law on Halal Products.
3	Model	Patterns (such as references, variances, etc.) of simplification of idealization to explain an object, system, or concept obtained through accurate and systematic research as an actual process that allows a person or group of people to act concerning these references. Example: Pasaman Curriculum Development Model.
4	Module	Learning media (independent teaching materials) which contain materials, methods, limitations, and ways of evaluating which are presented systematically and attractively to achieve the expected level of competence according to the level of complexity. Example: Module for Development of Forum for Religious Harmony
5	Guidelines	Regulatory instructions that contain how to carry out activities, including the order in which they are carried out, and contain matters relating to technical activities, as well as procedures, including the form of the evaluation carried out. Example: Guidelines for the Implementation of Islamic Religious Education in Public Universities.
6	Monograph	Scientific writings result from detailed R&D on a topic/subject with an in-depth level of discussion through various scientific approaches, written in book format, and published specifically. Example: Monograph of Islamic Boarding School
7	Bibliographies	A book or series of books that collect information or explanations about various things in science/art (especially in the religious field) arranged according to the substance in question. Bibliographic products such as encyclopedias, thesaurus, directories, catalogs, databases of religious treasures, and the kind of them. Example: Encyclopedia of Religious Leaders.
8	Religious Reading Materials	The product of the results of the study and study of scriptures carried out by expert religious leaders in the context of interpreting the scriptural scriptures on a certain subject/tema to respond to current problems. Example: Religious Reading Materials - Tafsir AI-Wajiz.
9	Master Copy Mushaf	The master manuscript is used as a reference for publications printed by the public or the publisher of the Qur'anic manuscripts, either in print or digitally. Example: Master Copy of Digital "Indonesian Standard" Mushaf.
10	Documents of religious thought (religious leaders of experts)	A document containing a collection of thoughts from religious leaders/experts in a certain matter containing policy recommendations obtained through a certain deliberation forum. Example: Document of Ulama Thought - Halaqoh Ulama Nusantara.

Source: (Decree of the Head of the Research, Development, Education and Training Agency of the Ministry of Religion of the Republic Indonesia: Guidelines for the Implementation of Research and Development, 2017)

This research will answer questions about mapping research results and product development at the R&D Center of the Ministry of Religion, obstacles, and solutions to optimize the utilization of research results. The results of this research are especially useful for policymakers at the Ministry of Religion to provide an overview of research results that have been developed in the form of product development, what obstacles hinder the use of research results, and what alternative solutions can be taken in determining policies related to the development of research results.

METHODS

This study uses a qualitative method, with typological analysis and content analysis. Typological analysis is a strategy for descriptive qualitative (or quantitative) data analysis whose goal is the development of a set of related but distinct categories within a phenomenon that distinguishes the entire phenomenon (Confucius, 2008), . The typological analysis carried out in this study is used to categorize various research results and their product developments carried out by the R&D Agency and Training of the Ministry of Religion of the Republic of Indonesia during the last three years (2018-2020). While content analysis is an intellectual process to categorize qualitative textual data into groups of similar entities, or conceptual categories, to identify consistent patterns and relationships between variables or themes (Confucius, 2008).

Data collection uses document studies as secondary data and in-depth interviews with several stakeholders as primary data. The stakeholders or informants in this study are:

1. Administrator of the Ministry of Religion Simlitbang website as an operator providing information on research results from Balitbangdiklat
2. Head of Subdivision of TU Puslitbang and BLA under the R&D and Training Agency of the Ministry of Religion of the Republic of Indonesia
3. Several researchers and writers/compiler of R&D products and BLA under the R&D Agency and Training of the Ministry of Religion of the Republic of Indonesia

This research focuses on the development of research results, the researchers focus on mapping the results of research that are developed into development products in the central work unit and regional work units whose main task and the main function is to conduct R&D. Therefore, the object of this research is the R&D Center (Puslitbang) of Community Guidance (Bimas) for Religion and Religious Services (Puslitbang 1), R&D Center of Religious and Religion Education (Puslitbang 2) and R&D Center of Literature, Religious Treasures and Organizational Management (Puslitbang 3) for the central work unit. Meanwhile, the regional work units that are the scope of this research are the Jakarta Religious R&D Center (BLA), Semarang Religious Research Center (BLA), and Makassar Religious Research Center (BLA).

RESULTS AND DISCUSSIONS

Mapping Research Results and Product Development, R&D Agency of Ministry of Religion

Based on the results of the mapping, the research conducted in 2018 – 2020 was not all directly developed into development products. However, there are also studies whose outputs and outcomes are directly in the form of product development. So that when the research is finished, the output or outcome of the research is a product development draft that is ready to be validated. This is like the research conducted by the research team of Puslitbang 2 in 2018. The research entitled Capacity Development of Teacher Working Groups (KKG) and Islamic Religious Education Subject Teacher Consultations (MGMP) in Schools resulted in three product developments at once in 2017 (*Research and Development and Training Agency Performance Report of the Ministry of Religion of the Republic of Indonesia in 2018*, 2018).

The development product is in the form of a guidebook with different targets, namely (1) Guidebook for Strengthening the Management of KKG PAI in Elementary Schools (SD), (2) Guidebooks for Strengthening Management of MGMP PAI in Junior High Schools (SMP), and (3) Guidebooks Strengthening PAI Management in Senior High Schools (SMA/SMK) (*Research and Development and Training Agency Performance Report of the Ministry of Religion of the Republic of Indonesia in 2019*, 2019). This is the result expected by various parties, but it is possible that product development is not sufficient based on one study, or within one year. Such as the development of the Early Conflict Warning System Application (Harmony) (*Jakarta Religious R&D Center Performance Report 2018*, 2018). It takes some integrated research from 2018 – 2020 to be able to develop this application. Any research that underlies the application also produces products for continuous development. Two studies conducted in 2018 related to this early warning system resulted in a product in the form of Guidelines for Early Warning and Response Systems for Religious Conflicts in 2019 (*Jakarta Religious R&D Center Performance Report 2019*, 2019). Meanwhile, further research related to this is entitled Warning Systems and Early Responses to Religious Conflicts Phase II: Variations in the Effectiveness of Early Responses to Conflicts Religion was conducted in 2019. The research resulted in a draft regulation in 2020 and the application of Harmoni in the same year and is still in the stage of improvement and testing for each stakeholder (*Jakarta Religious R&D Center Performance Report 2020*, 2020).

Several factors influenced the development of the results of this study based on interviews with informants at the three Puslitbang and BLA. These factors include:

1. Research Plan

There is a clear picture of how the research is used as a development product from the beginning before the research is carried out.

2. Readiness and initiative of researchers in developing research results

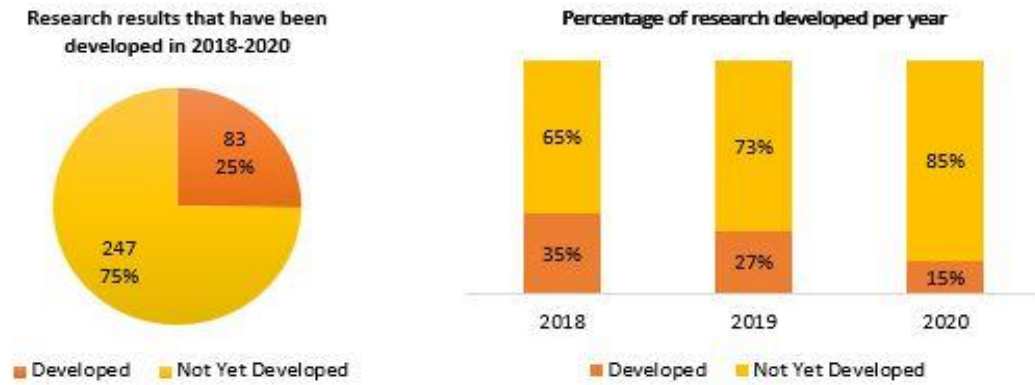


Figure 1. Distribution of Development Products Availability Derived from Research Results

3. Annual development budget from each work unit.

This factor is more about budget management for development. This means that each work unit has its allocation for development activities every year. But how to manage the budget to be more effective and efficient so that it can be used for development activities to the fullest. The maximum meaning here is certainly correlated with other factors, namely the priority of usefulness and the need for research results.

4. Priority for the usefulness and needs of research results developed at that time/year.

This factor means choosing which research should be developed first, and the form of a suitable product to be developed. In addition, it must be integrated with budget management in developing research results into a product.

5. HR / special team to create product development.

In developing research results into products, it is necessary to have a creative and innovative team that is focused on planning and managing up to the implementation of the product so that it is more optimal.

The distribution of the availability of developing products based on research results in 2018 – 2020 can be seen in Figure 1. During the last three years, 25% of research has been developed into products or as many as 83 studies from the three Puslitbang and the three BLAs (*Semarang Religious R&D Center Performance Report 2018, 2018; Semarang Religious R&D Center Performance Report 2019, 2019; Semarang Religious R&D Center Performance Report 2020, 2020*). Meanwhile, 247 studies have not yet been developed into products. This shows that the utilization of research results in the Research and Development Ministry of Religion has not been optimal. There is a large gap in research results that have not been followed up in product development. The results of research that produce development products when viewed from the graph appear to be decreasing from year to year.

In 2018, 35% or 39 of the 111 total research conducted in that year resulted in product development. Whereas in 2019, 27% or as many as 26 of the 97 total studies conducted that year. Then in 2020, it decreased to 15% or as many as 18 studies that have been developed into products. This indicates that the average process of research results being developed into products is more than

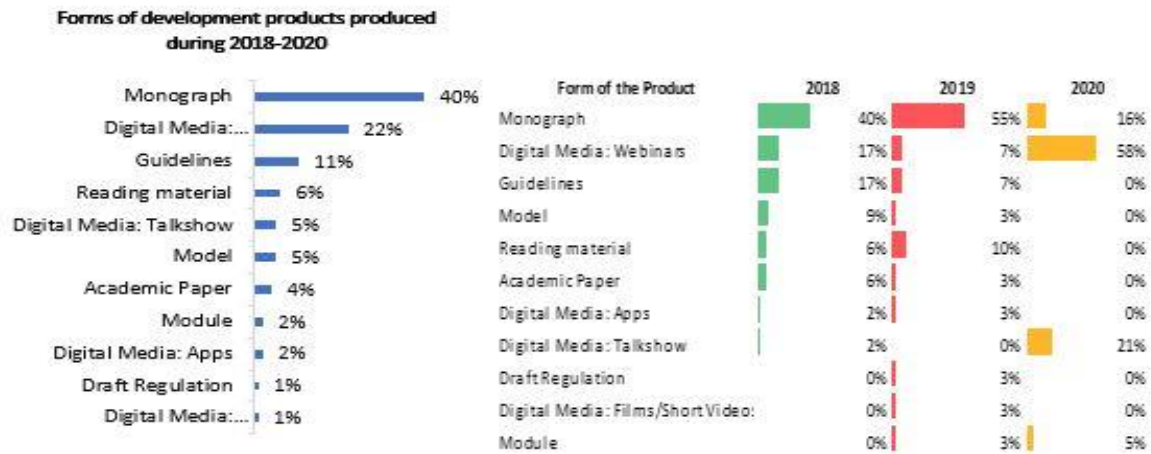


Figure 2. Distribution of Product Development Forms Derived from Research Results

Source: Authors Analysis

one year. This downward trend becomes natural if you look at the period from the completion of the research until it is developed into a product. If the research is conducted in 2020, it is possible that development products are not yet available so the number of developed products in that year is less than in previous years. The distribution of product development forms based on research results in 2018 – 2020 can be identified in Figure 2.

In 2018 – 2020 the number of development products based on research results is 95 products. These products are based on the number from the most developed to the least, including (1) monographs by 40% or 38 products, (2) digital media in the form of webinars by 22% or as many as 21 studies, (3) guidelines by 11 % or as many as 10 products, (4) reading materials by 6% or as many as 6 products, (5) digital media in the form of talk shows by 5% or as many as 5 products, (6) models by 5% or as many as 5 products, (7) manuscripts 4% or as many as 4 products, (8) modules by 2% or as many as two products, (9) digital media in the form of applications by 2% or as many as two products, (10) draft regulations by 1% or as many as one product and (11) digital media in the form of videos/short films by 1% or as much as 1 product.

Researchers did not find any development product based on the results of research in 2018 – 2020 in the form of religious thought documents, master copies of manuscripts, bibliographies, and religious reading materials (Figure 2). This does not mean that in the last three years there have been no development products in the forms mentioned, but because these products did not come from research results in 2018 - 2020. In addition, it is also possible that these products were developed based on research results before 2018. Some development products are not listed in Figure 2. The products that are not recorded are one of the outputs of the development activity agenda that has been planned based on the needs and urgency of their usefulness even though it is not based on research results. An example is the translation of the Mushaf/al-Quran developed by Puslitbang 3 (*Research and Development and Training Agency Performance Report of the Ministry of Religion of the Republic of Indonesia in 2020*, 2020).

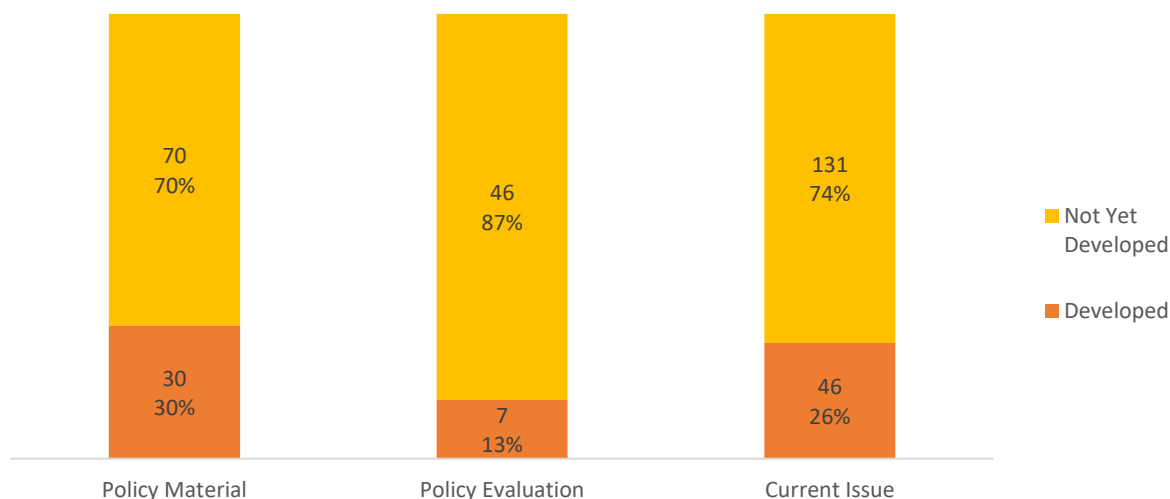


Figure 3. Distribution of Development Products Availability Derived from Research Results by Category

Source: Authors Analysis

The distribution of research results development products if reviewed annually, monographs became the most developed product in the last two years, 2018 and 2019 (*R&D Management Information System (SIMLITBANG)*, 2021). The reason why most research results were developed into monographs was because (1) The transition process from research reports to monographs quite easy, (2) can collaborate with other studies, (3) can collaborate with other researchers, and (4) There is already a collaboration with publishers, where Balitbang also has an LD Press. Meanwhile, digital media in the form of webinars are the products that provide the largest contribution to the number of product developments in 2020, which is 58% or as many as 11 products. This is a natural thing because in 2020 many face-to-face activities became virtual activities. By recording and sharing webinar videos on YouTube channels where wider and diverse targets/targets can access anytime and anywhere. For this reason, the choice of developing products into digital media in the form of webinars is the most widely used alternative in disseminating research results.

Research in the category of actual issues also contributes a lot to product development. Research that belongs to the category of actual issues is research that discusses or examines issues that are currently hot. So when the research is carried out and the results of the research are developed into a product, it will be very useful to answer the issues currently circulating. The development product of the actual issue can answer the solution to the current issue or can discuss the factors that the community needs to know about these issues. That way, the existence of product development as a result of research on actual issues will help the community understand the issues that are circulating and resolve these issues so as not to cause big problems and can prevent similar issues that are detrimental to society in the future.

Based on Figure 3, it can be seen the percentage of research in 2018-2020 that has produced development products by category. If viewed based on the

research category, research with the category of actual issues did produce the most product development, namely 46 studies that produced products. However, in terms of the proportion of conversions, it appears that the policy material category is superior, from a total of 100 studies, 30% resulted in product development. While the actual issue category is 26% of the total 177 kinds of research that produce development products. Meanwhile, the policy evaluation category has the lowest proportion of conversions, which is around 13% of the total 53 studies that have produced development products.

Research that is included in the category of policy materials is research on the results of studies or analyzes related to the formulation of policy materials. By formulating policies based on data from research results, the resulting policies will be of higher quality, effective and efficient, according to what is needed by the community. Data from the research must be processed in such a way in a product development so that stakeholders who want to formulate policies based on research results can understand the data and can use it as a source for making policies. Research in this category produces a lot of product development because the stakeholders/policymakers will understand more about the research results if the research results are developed in a product that can be read and understood by many people.

Research in the category of actual issues also contributes a lot to product development. Research that belongs to the category of actual issues is research that discusses or examines issues that are currently hot. Product development results from research with the category of actual issues can answer solutions to current issues or can discuss factors that need to be known by the community about these issues. That way, the existence of product development as a result of research on actual issues will help the community understand the issues that are circulating and resolve these issues so as not to cause big problems and can prevent similar issues that are detrimental to society in the future.

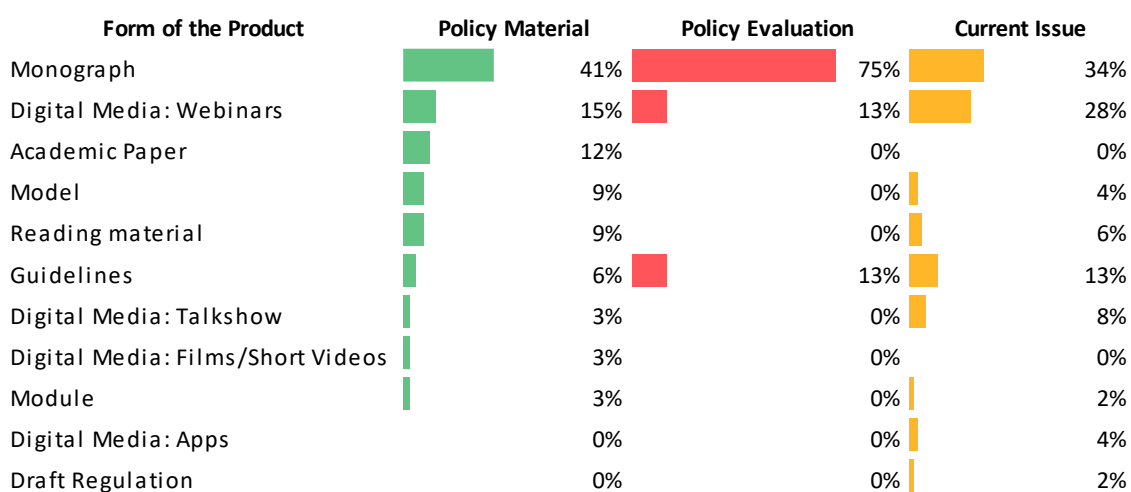


Figure 4. Distribution of Development Products Form derived from Research Results by Category

Source: Authors Analysis

The data in Figure 4 shows the distribution of research products development results in 2018-2020 by category. The most developed development products from 2018-2020 by category were monographs. In the research that is included in the policy evaluation category, the most produced development products are in the form of monographs (75%), digital media: webinars (13%), and products in the form of guidelines 13%. Research that falls into the category of policy materials, apart from monographs, is also developed in the form of digital media: webinars (15%), academic manuscripts (12%), models (9%), reading materials (9%), guidelines (6%), digital media: talk shows, videos/short films and modules (3%). In addition, for research that falls into the category of actual issues, apart from monographs (34%) research results are also developed in the form of digital media: webinars (28%), models (4%), reading materials (6%), guidelines (13%), digital media: talk shows (8%), digital media: applications (4%), modules and draft regulations (2%).

The monograph product is in great demand form. In addition to product development in the form of monographs, research with the category of policy materials is also widely developed into academic texts. Research on policy materials has been developed into academic texts because the results of the research contain data, studies, and analysis on a particular problem which can eventually be used as the basis for formulating policies. The academic paper itself is a form of development product in the form of a research paper or legal assessment and other research results on a certain problem that can be scientifically justified regarding the regulation of the problem in a Bill, Provincial Draft Regulation, or Regional Regulation Draft. Regency/City as a solution to the problems and legal needs of the community.

Product development in the form of guidelines is also seen to be produced by research in the category of policy evaluation and actual issues. These two categories produce many forms of product development in the form of guidelines because in the results of the research there are solutions and recommendations offered to answer existing research problems. By developing research results in the form of solutions and recommendations in the form of guidelines, the research results will be better understood by both the community and stakeholders. For example, research on actual issues regarding worship procedures during a pandemic certainly produces solutions and recommendations on how to worship during a pandemic. Product development in the form of guidelines based on the results of the research will be very useful for the community, especially during this pandemic.

Constraints and Solutions to Utilization of Research in Balitbang of the Ministry of Religion

The preparation of product development research results is carried out in stages. These stages generally have similarities for each form of product development. Stages of research results in product development begin with internal discussions, discussions with experts, and public testing in the form of

dissemination of research results. The results of the dissemination determine whether the research results need to be continued as a product of development. If most of the participants are in the dissemination or many propose, the research team will re-determine the value of novelty and the importance of the results of the research to be used as development products. Furthermore, if it has been agreed to be developed, it is submitted for publication in the form of books for products in the form of monographs, religious reading materials, bibliographies, models, modules, guidelines/guidelines, as well as general reading materials such as potpourri, short stories and others. After receiving a determination to be published, the next step is the preparation of the book and editing of the published manuscript. If the book manuscript has been fixed and passed and published in book form. Meanwhile, the determination of the form of product development is determined based on several factors. These factors include (1) the context of the research results, (2) the priority of the usefulness of the form of product development and (3) the allocation of the product development budget, and (4) the target of the product development. The context or content of the results of this study is correlated with research planning from the start. The planned research output produces substances that are suitable for which form of product development. Is it in the form of academic manuscripts, models, modules, guidelines/guidelines, reading materials, or other forms that have been stipulated in the Decree of the Head of Research and Development and Training of the Ministry of Religion of the Republic of Indonesia No. 46. Next is the priority for the benefit of the development product from the results/recommendations of the dissemination participants. and policymakers. Would the product be more useful if it was in the form of a model/guide/module and so on? Of course, this factor is also influenced by other factors, namely the development budget allocation and product development targets. Product targets can be targeted in general or specifically. The general scope can be for the wider community, while specifically it can be targeted at the subject or object. The subject can be to teachers, extension workers, service officers, employees with certain functional positions, or to students, students, and certain service users. While the object can be within the scope of schools, colleges, and certain areas. The influence of these factors can certainly be reviewed in further research.

In the process of identified research results and product development as well as analyzed the stages of product development, it can be concluded several research findings related to the obstacles experienced by researchers and product development compilers. Researchers identified constraints and solutions based on 3 perspectives. The first perspective is the perspective of the researcher, the perspective of product development compilers, and the perspective of the manager/administrative of the work unit. In this case, Researchers conducted in-depth interviews with 13 researchers/ product development developers. Table 2 shows the results of our in-depth interviews with the mentioned parties.

From the results of these interviews, there are 5 classifications of the main obstacles that cause the use of research to be less than optimal. According to the

Table 2. Constraints and Solution

No	Constraint	Description	Solution
1	Financial Constraints	Limited and inefficient development budget allocation and management Limited budget to work with commercial IT companies	Propose an increase in the budget accompanied by a development activity plan Collaboration with clubs/Student Activity Units and/or Digital/IT/robotic students from Vocational High Schools (SMK), Madrasah, or students at State Religious Colleges (PTKI)
2	Operational Constraints	Lack of development innovation There is still a lot of research that is not development-oriented	<ul style="list-style-type: none"> • Cultivating a work culture that is oriented towards creativity. This can be done through workshops, training, etc. by inviting creative agencies to collaborate in making product developments • Updating the Head of Agency Decree on Product Development Forms by adding current product forms and by the times (examples such as digital media: webinars, talk shows, short films/videos, applications, etc.) and reading materials. • Development-based research planning • Blindly apply the Minister of Religion Regulation (PMA) No 18 of 2019 regarding the utilization of R&D results by 11 1st echelon such as policy texts, policy papers
3	Sozialisation Constraints	Dissemination of development products is still passive Lack of innovation in product socialization	Utilization of modern platforms/media to market or socialize products, using Key Opinion Leader (KOL) Holding a product development competition that is open to the public
4	Human Resource Constraints	A researcher mindset where the development of research results is not a priority The absence of special human resources to carry out development activities.	Brainstorming with other research institutes about the importance of research product development. Forming a special field/team for the development of research results that focused on managing development activities
5	Policy Constraints	A very political development policy is not oriented to the quality and usefulness of development.	<ul style="list-style-type: none"> • Coordination between units related to production planning and development to increase product utility as needed to support the optimization of policy implementation within the Ministry of Religion. • Make product development research results one of the priority programs by getting a decent portion of the budget

Source: Authors Analysis

informant, policy constraints and human resources are the most constraining obstacles in optimizing research results. In terms of human resource constraints, the absence of human resources that specifically handle product development is the biggest obstacle. The majority of researchers are already busy with research activities and other activities so a special team is needed to focus on developing research results into a product. In addition, many researchers also do not consider product development to be a priority. "There is no team that focused on developing products derives from research results (Head of BLA Semarang, 2021)".

Meanwhile, in terms of policy constraints, the orientation of development activities, especially in the Ministry of Religion, is still too political, and not yet concerned with the benefits and quality of development products. Coordination between units is needed so that product utility can increase and there is a need for priority policy development programs to get a decent portion of the budget.

Obstacles can be related to the budget, human resources, or capacity for hosting. Because it is not a priority, in the event of budget cuts or refocusing development activities will have the potential to be eliminated or removed from the list of activities in the current year (RK, Monograph Author, 2021)

In addition to the two obstacles that are considered very critical, other obstacles such as financial, operational, and socialization constraints are also considered important in influencing the use of research results in development products. Financial constraints, for example, a budget allocation that is not so large for the development of research products can be overcome by collaborating with other agencies or increasing the budget in the following year.

Operational constraints such as the lack of innovation in the development of research products result in the development of products produced that are of less quality and less attractive. In addition to the two obstacles that are considered very critical, other obstacles such as financial, operational, and socialization constraints are also considered important in influencing the use of research results in development of products. Financial constraints, for example, a budget allocation that is not so large for the development of research products can be overcome by collaborating with other agencies or increasing the budget in the following year. Operational constraints such as the lack of innovation in the development of research products result in the development of products produced being of less quality and less attractive. of development products. This can be overcome by utilizing contemporary platforms/media to market or socialize products and by using Key Opinion Leaders (KOL) to influence the community.

CONCLUSION

The number of studies conducted by the Balitbang Ministry of Religious Affairs from 2018 - 2020 amounted to 330 studies. Out of a total of 330 studies conducted, about 25% or 83 studies have been developed into development

products in 2018 - 2020. The most common form of product development produced was monographs. Followed by webinars, guidelines, reading materials, talk shows, models, academic scripts, modules, applications, and short films/videos. Research with the policy material category produces a lot of development products when compared to the other two categories, namely actual issues and policy evaluations. This study also analyzes the five classifications of obstacles that hinder the use of research in product development. Constraints on human resources and policies are the most hindering obstacles to optimizing development. On the other hand, some solutions have been identified according to the constraints that have been analyzed.

However, for further research, researchers suggested studying further issues regarding the use of research that is still limited, such as analysis of the influence of factors that affect the product development process of research results. The analysis will be able to determine the magnitude and priority of the factors that influence it. So that it can be continued with research related to strategies in developing research products. Research with a similar theme can also add mapping with other classifications to enrich research with this theme

ACKNOWLEDGEMENTS

The author is grateful to the R&D Center of Lectures, Religious Treasures and Organizational Management (Puslitbang 3) of the R&D and Training Agency of the Ministry of Religion which is a sponsor in the framework of the research assignment for the 2021 output cost standard with the same title, is "Optimizing R&D Research Results in the Form of Product Development".

REFERENCES

- Confucius. (2008). Volumes 1-2. In *The SAGE Encyclopedia of QUALITATIVE RESEARCH METHODS*. https://books.google.com/books?id=y_OnAQAAMAAJ&pgis=1
- Muawanah, S., & Umi, M. (2019). *Effectiveness of Utilization of R&D Results in Supporting Policy Making*. R&D Center for literature, religious treasures and organizational management of the Ministry of Religion.
- Ness, E. C. (2010). *The Role of Information in the Policy Process: Implications for the Examination of Research Utilization in Higher Education Policy* (Issue April 2010). https://doi.org/10.1007/978-90-481-8598-6_1
- Sudarmonowati, E. (2012). *Peningkatan Peran Penelitian dan Iptek dalam Kebijakan Negara*. Lipi.Go.Id. <http://lipi.go.id/berita/single/Peningkatan-Peran-Penelitian-dan-Iptek-dalam-Kebijakan-Negara/13525>
- Walugembe, D. R., Kiwanuka, S. N., Matovu, J. K. B., Rutebemberwa, E., & Reichenbach, L. (2015). *Utilization of research findings for health policy making and practice: evidence from three case studies in Bangladesh*. <https://doi.org/10.1186/s12961-015-0015-x>
- Jakarta Religious R&D Center Performance Report 2018. (2018).
- Jakarta Religious R&D Center Performance Report 2020. (2020).
- Jakarta Religious R&D Center Performance Report 2019. (2019).
- Research and Development and Training Agency Performance Report of the Ministry of Religion of the Republic of Indonesia in 2018. (2018).
- Research and Development and Training Agency Performance Report of the Ministry of Religion of the Republic of Indonesia in 2019. (2019).
- Research and Development and Training Agency Performance Report of the Ministry of

- Religion of the Republic of Indonesia in 2020*. (2020).
Semarang Religious R&D Center Performance Report 2018. (2018).
Semarang Religious R&D Center Performance Report 2019. (2019).
Semarang Religious R&D Center Performance Report 2020. (2020).
Decree of the Head of the Research, Development, Education and Training Agency of the
Ministry of Religion of the Republic Indonesia: Guidelines for the Implementation
of Research and Development, (2017).
R&D Management Information System (SIMLITBANG). (2021). Ministry of Religion.
<https://simlitbang.kemenag.go.id/>