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# CURRICULUM DEVELOPMENT MODEL ON DISASTER MITIGATION TRAINING IN ISLAMIC PERSPECTIVE

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#### **Abstract**

This study aims to develop a Disaster Mitigation Training Curriculum Model from an Islamic Perspective (MBPI). The research employed a Research and Development (R&D) approach using the ADDIE model (Analyze, Design, Develop, Implement, Evaluate). The study was conducted at the Disaster Management Training Center (Pusdiklat PB BNPB) in Sentul, Bogor. Data were collected through closed and open-ended questionnaires involving 94 respondents from various professions, along with in-depth interviews with religious leaders and academics. Data analysis techniques included descriptive statistics using SPSS and thematic analysis using NVivo. The needs analysis results showed a positive response with an average score of 88.44% (categorized as good). The MBPI curriculum was structured into three parts: basic, core, and supplementary, with emphasis on the values of monotheism, worship, and social solidarity in the disaster context. The training was conducted over three days with 36 participants, resulting in an average class score of 88.47. Evaluation findings confirmed that the MBPI curriculum is feasible for implementation and was endorsed by experts as a model for Islamic-based disaster mitigation training. The study concludes that the MBPI curriculum is relevant to be applied nationally through BPBD, BPSDM, and the Ministry of Religious Affairs as a disaster education policy strategy integrated with Islamic education.

#### Keywords

Curriculum, Development, Disaster Mitigation, Islamic Perspective, Training.



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#### **INTRODUCTION**

Indonesia, as the country with the second-largest Muslim population in the world, is highly vulnerable to various types of disasters due to its geographical position within the Pacific Ring of Fire. According to the World Population Review (2025), approximately 245 million people, or 87.08% of the total population, are Muslims. In Islamic teachings, disaster management is viewed not only as a technical necessity but also as a moral and social responsibility. Islam emphasizes preparedness, collective responsibility, and humanitarian assistance, aligning with the universal disaster risk reduction principles. Meanwhile, (Undang-Undang Nomor 24 Tahun 2007 Tentang Penanggulangan Bencana, 2007) highlights the importance of mitigation, preparedness, and post-disaster recovery while maintaining neutrality in religious propagation during emergency response. However, from an Islamic perspective, integrating values such as tawhid (belief in the oneness of God), worship, and social solidarity can strengthen community resilience and disaster awareness.

Despite the existing legal and institutional frameworks, disaster management in Indonesia remains reactive, with high casualties and losses often resulting from inadequate preparedness and a lack of community capacity. Limited government resources make it essential to empower local communities through knowledge, skills, and attitudes that enable them to anticipate, prevent, and respond effectively to disasters. Religious institutions and education, especially Islamic Religious Education (PAI), play a strategic role in shaping disaster-aware and mitigation-minded communities. Disaster training models incorporating Islamic perspectives can bridge the gap between technical disaster management and spiritual-ethical values, fostering a holistic approach that resonates with Indonesian society's cultural and religious context (Sukumaran, 2022).

Several previous studies have demonstrated the importance of integrating disaster education with faith-based approaches. (Azad et al., 2022; Ratcliffe et al., 2020; Rivera & Nickels, 2014) Highlighted how religious teachings can enhance community resilience and collective action during disasters. (Elfira et al., 2023; Nasution et al., 2025; Nuryana & Fauzi, 2020a) Found that embedding Islamic values in school disaster education significantly improved students' preparedness and mitigation behavior. (Adiyoso & Kanegae, 2013; Duhung et al., 2024; Waluyo et al., 2024) Developed a disaster risk reduction program for Islamic boarding schools, which increased disaster awareness and response skills among students. (Alfian et al., 2025; Hodijah et al., 2023; Razali et al., 2024) Adapted disaster management curricula to align with Indonesian Muslims' cultural and religious characteristics, making it more contextually relevant. Similarly, (Koopman, 2023; Mufarokah et al.,

2025; Seddiky et al., 2020) emphasize the effectiveness of community-based disaster mitigation training rooted in Islamic principles to strengthen technical knowledge and moral responsibility. These studies confirm that integrating Islamic perspectives into disaster education enhances both cognitive and ethical aspects of preparedness.

However, most of these previous studies remain focused on theoretical frameworks, awareness campaigns, or isolated training programs without providing a comprehensive curriculum model that can be systematically implemented at various educational and community levels. There is a lack of structured disaster mitigation training curricula integrating Islamic perspectives with national disaster management policies and international standards. Moreover, few studies have validated such curricula through expert review and pilot implementation, leaving a significant gap between research findings and practical applications. Therefore, there is a need for a curriculum model that not only embeds Islamic values into disaster mitigation but is also academically sound, contextually relevant, and practically applicable for the broader Muslim community in Indonesia.

This study aims to develop a structured disaster mitigation training curriculum from an Islamic perspective that aligns with national disaster management policies while addressing Indonesian society's cultural and religious needs. The curriculum enhances community knowledge, attitudes, and skills in disaster preparedness, response, and recovery while integrating Islamic principles such as tawhid, social solidarity, and ethical responsibility. By producing a validated and implementable curriculum, this research seeks to contribute to disaster risk reduction efforts through technically comprehensive and spiritually meaningful education, ultimately fostering a more resilient and mitigation-minded Muslim community in Indonesia.

#### **METHOD**

This study employed a Research and Development (R&D) design using the ADDIE model (Analyze, Design, Develop, Implement, Evaluate) to develop a Disaster Mitigation Training Curriculum from an Islamic perspective. The R&D approach was chosen because the main objective of this research was to produce a curriculum model that can be developed, tested, and applied in a broader context, rather than merely exploring phenomena through mixed-methods data. Each phase of ADDIE was systematically applied to ensure clarity in the development stages and the practical use of the curriculum (Sa'adah, 2020).

The study was conducted at the Disaster Management Education and Training Center (Pusdiklat PB BNPB) from March to December 2024. Data sources included primary and secondary data. The primary data were obtained through questionnaires, interviews, and observations. The study involved 94 respondents drawn from seven professional groups: instructors, staff, analysts, students, leaders, teachers, and health workers. Respondents were selected using purposive sampling based on inclusion criteria (e.g., willingness to participate and signing informed consent) and exclusion criteria (e.g., physical or mental illness). Quantitative data were collected using closed questionnaires and analyzed using SPSS to generate descriptive statistics. Qualitative data were collected through in-depth interviews with selected key informants — including Islamic scholars and disaster management experts — and analyzed using NVivo for coding and thematic analysis.

In the Analyze phase, a needs assessment was conducted to evaluate the current state of disaster education, highlighting the gap in spiritual and Islamic-based content. The design phase focused on curriculum planning and incorporating Islamic values into disaster mitigation training materials. In the development phase, the revised curriculum draft was produced by integrating results from surveys and expert interviews, then refined based on the analysis of previous competency-based curricula. The Implementation stage included a three-day trial training involving 36 participants, and the Evaluation phase assessed curriculum feasibility, learning outcomes, and participant feedback to determine the effectiveness and applicability of the curriculum model in different disaster-prone regions (Okpatrioka, 2023).

## FINDINGS AND DISCUSSION

## **Findings**

The Disaster Management Education and Training Center (Pusdiklat PB), located at INA-DRTG in the IPSC Complex, Citeureup, Bogor, provides classrooms, simulation fields, and technical training areas for disaster management. Guided by BNPB Regulation No. 4/2019, it coordinates and implements human resource capacity building, training, simulations, program development, and accreditation at national and international levels. The center has 48 staff members, including structural officials, functional staff, and support personnel.

## **ADDIE Method Curriculum Development Model**

ADDIE is an acronym for Analyze, Design, Develop, Implement, and Evaluate. The concept of the ADDIE model applies to building basic performance in learning, namely the idea of

developing a learning product design. ADDIE is an instructional design centered on individual learning, has immediate and long-term phases, is systematic, and uses a systems approach to knowledge and human learning. The ADDIE learning model is based on an effective and efficient systems approach, and the process is interactive. The results of evaluating each learning step can lead to the development of learning in the next step or phase.

#### 1. Analysis

Researchers surveyed 94 respondents from seven professional groups—Widyaiswara, staff, analysts, students, leaders, teachers, and health workers—to analyze gaps in learning performance and assess the relevance of an Islamic-based disaster mitigation curriculum. Using 19 Likert-scale questions (1–5, from Very Unsuitable to Very Suitable), the needs analysis aimed to ensure the curriculum meets the needs of Islamic disaster observer communities. Quantitative analysis covered respondent characteristics and their responses to curriculum training competencies, with results presented in a frequency distribution table.

## 2. Data Analysis

The following are the results of the Quantitative Analysis, including the characteristics of respondents and respondents' responses to curriculum training competencies:

## a) Respondent Characteristics (n=94)

**Table 1.** Table of Respondent Characteristics (n=94)

No	Characteristics	n	%
1.	Institution		
	BNPB	21	22,3
	BPBD	13	13,8
	BPSDM	5	5,3
	College	25	26,6
	Community	30	31,9
	Institutions/Org		
	anizations		
2.	Position		
	Widyaiswara	20	21,3
	Staff	16	16,9
	Analyst	8	8,5
	Student	4	4,3
	Head of Agency	29	30,9
	Instructor	12	12,8
	Health workers	5	5,3
3.	Gender		
	Male	67	71,3
	Female	27	28,7
4.	Age		

No	Characteristics	n	<b>%</b>
	Teenager	4	4,3
	Adult	36	38,3
	Elderly	54	57,4
5.	Education		
	Junior High	0	0
	School		
	Senior High	1	1,1
	School		
	Associate's	2	2,1
	Degree		
	Bachelor Degree	28	29,8
	Master Degree	46	49
	Doctorate	17	18,1
	Degree		

In the respondent population (n=94), the most dominant agency is community institutions/organizations (32%), the dominant position is leader (31%), the dominant gender is male (71.3%), the dominant age is elderly (57.4%), and the dominant education is S2 (49%).

## b) Survey Results with 17 Questions (54 items)

The following are the results of the Quantitative Survey of responses to questions on Disaster Mitigation Curriculum Development in an Islamic Perspective, with the number of questions in the survey of 94 respondents being 17 questions, with all questions being positive questions, with a range of 1 to 5, namely very unsuitable to very suitable (attachment).

**Table 2.** Average Respondents' Responses to Questions on Disaster Mitigation Curriculum Development Materials in an Islamic Perspective (n=54)

No	Question	Average (%)
1	Do you agree that disasters are man-made?	81,4
2	Do you think disasters are the destiny of Allah SWT	81,7
3	Do you agree that disasters can be reduced in impact through mitigation?	93,8
4	Disaster Mitigation can be implemented by improving skills and knowledge.	94
5	Disaster Mitigation Training from an Islamic Perspective is needed	92,5
6	In your opinion, a disaster mitigation curriculum from an Islamic perspective needs to be developed.	90,4
7	Disaster in Islamic perspective	
7.a	Concept of Disaster	90
7.b	Types of Disasters	89,7
7.c	View of Disaster	87,6
7.d	Disaster in Islamic Perspective	90,2
8	Disaster Management	
8.a	Definition of disaster management	90,8
8.b	Stages of disaster management	80

No	Question	Average (%)
8.c	Principles of national disaster management	80
8.d	National disaster management system	92,9
9	Disaster risk reduction from an Islamic perspective	
9.a	Definition of Disaster Risk Reduction	88,9
9.b	Disaster Risk Management	89,5
9.c	Disaster Risk Reduction Activities	89,3
9.d	Disaster Risk Reduction Activities	90,2
10	Disaster Emergency Management in an Islamic Perspective	
10.a	Concept of Disaster Emergency	88,7
10.b	Emergency Response Process	88
10.c	Things to Pay Attention to During Emergency Response	90
10.d	Obstacles in Emergency Response	89,3
11	Post-disaster recovery management from an Islamic perspective	
11.a	Definition of Rehabilitation and Reconstruction	87,6
11.b	Post-Disaster Rehabilitation	88
11.c	Scope of Rehabilitation Implementation	87,4
11.d	Post-Disaster Reconstruction	89,1
11.e	Principles of Recovery	88,5
11.f	Post-Disaster Needs Assessment	88,7
11.g	Basic Principles in Post-Disaster Needs Assessment	88
11.h	Disaster Impact and Loss Assessment	87,6
11.i	Impact Assessment	87,6
12	Handling and management of refugees from an Islamic Perspective	
12.a	Refugee Concept	86,3
12.b	Refugee Handling	87,8
12.c	Data and Information Management	90,2
12.d	Refugee Protection	90
12.e	Refugee Placement	89,5
12.f	Compensation and Return of Refugee Rights	88,7
12.g	Participation of Non-Governmental Organizations, Business	88,5
12.h	Institutions and the Community	89,7
12.i	Monitoring, Evaluation, and Reporting	89,3
13	Disaster Survivors	
13.a	Role of Religious Leaders in Disaster Management	89,1
13.b	The Role of Religious Leaders in Disaster Management	90,2
14	Disaster Management Activities from an Islamic Perspective	
17	Safe Houses of Worship and Disaster Preparedness	
14.a	Definition of House of Worship	87,2

No	Question	Average (%)		
14.b	Definition of Mosque	87,2		
14.c	Function of the House of Worship	89,1		
14.d	Safe and Disaster Preparedness House of Worship	92,1		
14.e	Disaster Emergency Mosque	91,2		
15	The Function of Houses of Worship in Disaster Management			
15.a	Function of the House of Worship	87,2		
15.b	Mosque Function in Disaster Management	80,5		
15.c	Things to Do in Handling Refugees in the Mosque	88,9		
16	Strategies in Implementing Islam-based DRR			
16.a	Strategies for Implementing DRR in a Resilient Mosque	87,2		
16.b	Stages of Implementing DRR in Diversity Activities	86,1		
17	Islamic-based disaster simulation			
17.a	Disaster Socialization	89,3		
17.b	Disaster Simulation	89,1		

Table 2 shows that 94 respondents expressed strong support—averaging 88.44%—for an Islamic-based disaster mitigation curriculum, with most survey items scoring above 85% and several exceeding 90%. Respondents agreed that disasters can be mitigated through improved knowledge and that education should formalize Islamic perspectives. They recognized disaster causes, risk reduction, and management as aligned with Islamic teachings, while slightly lower scores (around 80%) appeared on disaster management stages and national principles, suggesting areas for enhancement. High agreement was also noted on emergency response, refugee management, the role of mosques, and Islamic-based simulation activities, reinforcing the curriculum's relevance. The following are the results of the analysis using SPSS software. The average response of the respondents is as follows:

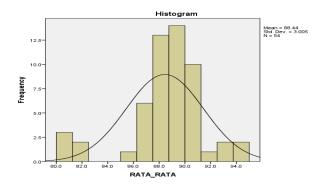
**Table 3.** Respondents' Responses to the Reality of Disaster Mitigation Curriculum Development in an Islamic Perspective at the PB Training Center

N	Valid	54
	Missing	0
Mean		88.441
Std. Error of Mean		.4089
Median		89.000
Mode		87.2ª
Std. Deviation		3.0047
Variance		9.028
Skewness		-1.284
Std. Error of		.325
Skewness		

Kurtosis		2.399		
Std. Error of Kur	tosis	.639		
Range		14.0		
Minimum		80.0		
Maximum		94.0		
Sum		4775.8		
Percentiles	10	83.900		
	20	87.200		
	30	87.700		
	40	88.500		
	50	89.000		
	60	89.300		
	70	89.700		
	80	90.200		
	90	91.650		

a. Multiple modes exist. The smallest value is shown.

From the data processing output above shows the results of the questionnaire distributed to respondents consisting of 7 types of professions in the community with a sample size of 94 respondents, where the respondents' responses with topic items = 54 items, obtained a mean value = 88.44%, mode = 87.2%, standard deviation = 3.00%, with the minimum value being 80%, and the maximum = 94%. The percentiles statistical measure describes the percentage of data that falls below a specific value in a data set, which provides a detailed breakdown of the distribution, where 10% of respondents rated the curriculum below 83.9. In comparison, 90% rated it above 91.65.



**Figure 1.** Graph of Respondents' Responses to the Reality of Disaster Mitigation Curriculum

Development in an Islamic Perspective at the DM Training Center

From the data in Figure 1, it can be seen that the average respondent's response was 88.44% in the good category. Thus, the development of the Islamic-based disaster mitigation curriculum is categorized as good.

#### 1) Open Question Results

In addition to the Likert-scale questions, researchers used 19 open-ended questions to gather deeper insights into knowledge, attitudes, disaster mitigation behavior among Muslims, and competencies in disaster management in Indonesia. Responses were grouped by profession—

Widyaiswara, staff, analysts, students, agency heads, teachers, and health workers—and analyzed using NVivo software. Through coding, researchers identified relevant themes, concepts, and categories, enabling a qualitative analysis of respondents' perspectives on the role and impact of Islamic-based disaster mitigation training.



Figure 2. Word Cloud from NVivo Code Results

NVivo Word Cloud analysis revealed that the research emphasizes various aspects of disasters, including their causes, types, impacts, and mitigation efforts. It also highlights Islamic perspectives and the roles of individuals and communities. Frequently appearing keywords included disaster, human, nature, Islam, Allah, community, mitigation, and environment, reflecting the integration of technical and spiritual dimensions. Thematic analysis showed that each professional group offered unique insights, which can inform the development of more inclusive disaster policies that address diverse professional and community needs.

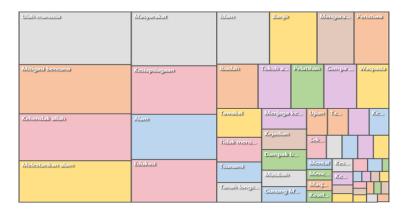


Figure 3. Hierarchy Diagram of NVivo Code Results

A treemap visualization from NVivo highlights "Human Behavior," "Society," and "Islam" as the most frequent and significant themes in the qualitative data, reflecting the strong influence of human actions, community roles, and Islamic perspectives in disaster contexts. Quantitative analysis from 94 respondents yielded an average agreement score of 88.4% ("Good"), forming the basis for developing an Islamic-based disaster mitigation curriculum. To assess implementation readiness, key informants, including Prof. Dr. Syamsul Maarif from the Defense University, emphasized that the curriculum aligns with disaster management policies without promoting religious propagation, focusing instead on Islamic perspectives for mitigation. Similarly, Dr. H.M. Anwar from LBIQ Jakarta supported its broader application, stressing the importance of pre-, during-, and post-disaster materials to raise awareness, strengthen preparedness, and foster mutual reminders of disaster risks within the community.

## 3. Design

The planning stage follows the analysis phase to design an Islamic-based disaster mitigation training curriculum, encompassing planning, implementation, and evaluation. This training management integrates human, informational, systemic, and financial resources while adhering to management functions and expertise to ensure the program meets its objectives and benefits participants. Six key elements guide this process: (1) analyzing training needs to identify problems and determine when and where training is required; (2) setting objectives based on competency gaps; (3) designing and compiling the curriculum; (4) organizing training according to the curriculum; (5) evaluating training outcomes to assess success; and (6) implementing quality control to ensure alignment between planning, organization, and execution.

## 4. Development

After the competencies are obtained from the survey results, the next step is for the key informants to draft a revised curriculum. The development of this revised curriculum was based on the results of the previous curriculum, namely the Competency-Based Disaster Management Basic Training Curriculum. In addition, this curriculum development is also the result of surveys and indepth interviews. Based on the previous curriculum, survey results, and in-depth interviews, the researchers developed a model of Disaster Mitigation Training Curriculum in an Islamic Perspective. The following is a table of disaster mitigation curriculum development from an Islamic perspective:

Table 4. Disaster Mitigation Curriculum Development in an Islamic Perspective

	Basics of Disaster	Management (DM)		I	Disaster Mitigatio	n in an Islamic Perspectiv	re
No	Subjects	Topic	JPL	No	Subjects	Topic	JPL
	Basic Training Subjects				Basic T	raining Subjects	
1	Program Briefing		1	1	Shar'i Legal Basis of	1) Evidence Related to Disaster Mitigation	2
					Disaster Mitigation in Islamic Perspective	2) Events That Are in Accordance with Disaster Mitigation	
2	Group Dynamics	1) Group Dynamics	4	2	Disaster Management	<ol> <li>Disaster</li> <li>Management</li> </ol>	2
		2) Effective			Policy in	2) Principles of Disaster	
3	Follow Up Plan	Teamwork	1		Indonesia	Management	
	Follow-Up Plan	ing Subjects	1		Coro Tr	raining Subjects	
	Disaster	1) Concept Of		1	Conception Of	1) Disaster	
1	Disaster	Disaster Of	3	1	Disaster	1) Disaster	2
		2) Types Of Disasters				2) Types of Disasters	
		3) Disaster				3) Concept / View of	
		Characteristics				Disaster	
	Basis And	1) Concept And		2	Disasters In	1) Disasters In Islamic	
2	System of Disaster	System of Dm	6		Islamic Perspective	Perspective	2
	Management (Dm)	<ul><li>2) Dm Best Practice</li><li>3) Principles And Ethics of Dm</li></ul>				2) Events, or History and Examples of Disasters In Islamic Perspective	
3	Disaster Management 1) Logistics And Equipment Management	1) Disaster/Pre- Disaster Risk Management	4	3	Disaster Mitigation	<ol> <li>Disaster Mitigation</li> <li>Disaster Risk Management</li> </ol>	2
	System	2) Disaster Risk Management	4			3) Examples of Disaster Mitigation	
	Disaster	1) Logistics And		4	Disaster	1) Pre-Disaster	
4	Logistics and Equipment Management	Equipment Management System	3		Mitigation in Pre, During, And Post	Mitigation in an Islamic Perspective	4
E	Data,	Logistics Cluster     Disaster Data &  Information	2		Disaster in an Islamic View	<ul> <li>2) During Disaster</li> <li>Mitigation in an Islamic</li> <li>Perspective</li> <li>3) Post-Disaster</li> <li>Mitigation in an Islamic</li> </ul>	
5	Information, And	Information	3	_	7 1 7470 7	Mitigation in an Islamic Perspective	
	Communication Management for Disaster	2) Disaster Information Technology		5	Local Wisdom in an Islamic Perspective	1) Local Wisdom in Islamic Perspective	2

	Basics of Disaster Management (DM) Disaster			Disaster Mitigatio	saster Mitigation in an Islamic Perspective		
No	Subjects	Topic	JPL	No	Subjects	Topic	JPL
	Management	3) Disaster				2) Principles And	
		Communication				Traditions of Local	
						Wisdom in Islamic	
						Perspective	
6	Multistakeholder	1) Multi-				3) Local Wisdom of	
	Cooperation in	Stakeholder				Culture, Religious	
	Disaster	Cooperation in	3			Leaders, And Houses	
	Management	Disaster				of Worship in Islamic	
	O	Management				Perspective	
		2) Disaster				I	
		Management					
		Cluster					
		3) International					
		Cooperation in					
		Disaster					
		Management					
	Additional T	raining Subjects			Additiona	l Training Subjects	
1	Socialization of		2	1	Training		1
	Disaster				Program		
	Management				Briefing		
	Certification						
2	Visitation or		4	2	Group	1) Expectations and	2
	Practical Field				Dynamics	Strategies for	
	Skills Practice				•	Achieving Expectations	
	(Material					2) Classroom Norms	
	Options: Setting					and Values	
	Up Emergency						
	Tents, Field						
	Kitchens,						
	Practical						
	Mitigation, or as						
	Needed by						
	Participants)						
3	Opening and			3	Follow-Up Plan	1) Rtl Concent	1
3	Closing			3	10110W Op 1 lan	1, mi concept	•
4	Pre-Test and Post-					2) Rtl Components	
-1	Test					-, mi components	
5	Opening and			4	Use of Ina Risk	1) Benefits of Inarisk	3
	Closing					,	
	O					2) How To use Inarisk	
						3) Simulation	
	Amou	ınt	43		An	nount	25
	711100				2 111		

In the development phase, the Islamic-based disaster mitigation curriculum was formulated using data from needs analyses, surveys, and key informant interviews, integrating existing disaster management training structures with Islamic values aligned with mitigation principles. The

curriculum underwent expert validation involving disaster management specialists, Islamic education curriculum experts, and training practitioners, who assessed the material's substance, competency relevance, content structure, and the integration of technical and spiritual aspects. Feedback from this validation refined the curriculum to ensure it meets academic standards and is practically applicable, resulting in a program grounded in strong theory while addressing real-world training needs.

## 5. Implementation

The Disaster Mitigation Training in Islamic Perspective (MBPI) was implemented online with 36 active participants, aiming to enhance community capacity and preparedness by integrating Islamic values alongside technical disaster management principles. The curriculum covered basic materials on legal foundations of disaster mitigation and Shari'ah law, core topics on disaster concepts, policies, and local wisdom, and supporting content such as InaRisk technology for risk analysis. Participants from diverse institutional backgrounds engaged in pre-tests, interactive discussions, simulations, and post-training evaluations, demonstrating significant improvements in their knowledge and skills while reinforcing principles of tawhid, worship, and social solidarity in disaster contexts.

#### 6. Evaluation

This evaluation stage aimed to assess the quality of the product and the learning process before and after implementation, following Branch (2009). It involved determining evaluation criteria, selecting appropriate tools, and conducting the assessment using data gathered from questionnaires, surveys, interviews, observations, and supporting documents. The evaluation results, which can be presented in tables or graphics, provide a comprehensive overview of the program's effectiveness and highlight key findings from multiple data sources.

#### Discussion

The first stage in the ADDIE development model, according to Sugiyono, is needs analysis. At this stage, learning developers analyze learning needs. This analysis includes the identification of learning problems and learning objectives. By conducting an in-depth needs analysis, teaching developers can design learning programs that meet the needs. The advantage of the ADDIE development model, according to Okpatrioka, in the needs analysis stage is the focus on a deeper understanding of needs (Okpatrioka, 2023). With a better understanding of learning needs, the learning program designed will be more relevant and practical. However, the disadvantage of this

model is that it requires considerable time and resources to conduct an in-depth needs analysis.

Researchers have conducted a planning process involving all government and community elements. The target population of respondents (n=94) surveyed came from aspects of the community and government, such as the National Disaster Management Authority (BNPB), Local Disaster Management Agency (BPBD), Human Resource Development Agency (BPSDM), and Universities and Community Institutions/Organizations. The most dominant institution/community organization was 31.9%. Then, for the dominant position, the leader is as much as 31% of the 7 (seven) types of positions surveyed, namely Widyaiswara, Staff, Analysts, Students, Leaders, Teaching Staff, and Health Workers. The dominant gender is male as much as 71.3%, the dominant age is elderly as much as 57.4%, and the dominant education is S2 as much as 49% so that the resulting curriculum is by the expected educational objectives, which are expressed as human characteristics that can be developed over time through learning integration. For example, literacy and critical thinking skills (micro), with macro goals to categorize where several micro goals are classified. For instance, socialization, economic productivity, personal development, and further learning. The average response of respondents was 88.44% in the good category. Therefore, implementing the Islam-based disaster mitigation curriculum development is categorized as good (Fuedsi et al., 2024; Rahmat et al., 2024; Rahmat & Kurniadi, 2020; Sari & Apriyantika, 2020; Walid & Acetylena, 2024).

Overall, the results of the current research have integrated religious values in the context of disaster mitigation, so it can be concluded that the correlation between the results of previous research and the disaster mitigation curriculum in an Islamic perspective shows the existence of Islamic religious views that not only provide a theoretical basis, but also provide practical direction to be integrated in disaster mitigation training. Through this curriculum, trainees can learn how to deal with disasters technically and build spiritual awareness and moral responsibility towards nature (de Cadiz & Aguirre Jr, 2021; Haghani & Waller, 2023; Petrich, 2022; Righi et al., 2021).

The reality of differences in the implementation of the basic disaster management curriculum and the disaster mitigation curriculum in an islamic perspective, is explained as follows: Based on the hypothesis findings carried out in a qualitative process in the form of interviews with key informants who are experts and by their competence, namely the field of national disaster management and the field of scholars/clerics/lecturers who master the contents of the Quran and Hadith, the following discussion outlines the results of the comparison between the old and new

curriculum using a questionnaire, namely related to the knowledge, attitudes and behavior of the trainees who are respondents to the training in dealing with disasters.

The comparison between implementing the Basic Disaster Management Curriculum and the Disaster Mitigation Curriculum from an Islamic Perspective reveals significant differences in the trainees' knowledge, attitudes, and behavior. Interviews with key informants—national disaster management experts, scholars, and lecturers well-versed in the Qur'an and Hadith—indicate that the new curriculum offers a more holistic approach by integrating spiritual aspects and Islamic values into technical disaster materials. While the basic curriculum focuses on technical procedures, the MBPI curriculum integrates monotheism, patience, and social solidarity, promoting more holistic and value-based disaster preparedness. Questionnaire results from trainees support these findings, showing increased awareness and more religiously grounded responses to disaster threats (Acetylena & Saputra, 2024; Hardwick & Stephens, 2020; Park, 2020; Reis et al., 2023).

At this stage, learning developers create teaching materials and modules and implement the learning strategies that have been designed previously. The advantage of the ADDIE development model, according to Okpatrioka, in the development stage is the systematic application of the learning program design. With a structured application, learning developers can ensure that the teaching materials and learning strategies align with predetermined learning objectives. However, the drawback of this model is that it can require considerable time and effort in the development process. In general, the Competency-Based Disaster Management Basic Training Curriculum focuses more on practical approaches in dealing with disasters technically, with more detailed material in disaster management, logistics, data, and multi-stakeholder cooperation. Meanwhile, the disaster mitigation in the Islamic perspective training curriculum focuses more on the Islamic perspective, linking disaster concepts with Islamic teachings, such as the basis of Islamic law, disaster mitigation according to Islamic teachings, and local wisdom (Bakti & Muhammad, 2024; Marhadi et al., 2024; Musthofa & Indartono, 2020; Nuryana & Fauzi, 2020b; Triastari et al., 2021).

A comparison between the two curricula shows that the Competency-Based Disaster Management Basic Training Curriculum focuses more on the technical and managerial aspects of disaster management in general. Meanwhile, the Disaster Mitigation in Islamic Perspective Training Curriculum integrates religious values and local wisdom in the mitigation approach. This provides an additional dimension that is relevant for the context of Muslim communities in dealing with disasters. It can be concluded that the two curricula have different focuses, whereas the

Competency-Based Disaster Management Basic Training Curriculum emphasizes the technical and operational handling of disasters. In contrast, the Disaster Mitigation Training Curriculum in an Islamic Perspective emphasizes disaster management with an approach to Islamic values and local wisdom.

In this stage, the learning program that has been designed and developed will be implemented in the actual learning context. The advantages of the ADDIE development model, according to Sugiyono, in the implementation stage are the structured application of the learning program into the actual learning context. With a structured application, learning developers can ensure that the learning process runs well, without significant obstacles. However, the disadvantage of this model is the gap between the design of the learning program and the actual implementation (Goodman, 2000; Harvey & Kamvounias, 2008; Mehalik et al., 2008; Murphy et al., 2001). The learning program is evaluated to assess its effectiveness and efficiency at this stage. This evaluation includes data collection, analysis, conclusion drawing, and future learning program development recommendations. A good review will ensure that the learning program can continue to be improved according to learning needs. The advantage of the ADDIE development model, according to Okpatrioka, in the evaluation stage is the emphasis on in-depth evaluation and systematic data analysis. With this emphasis, learning developers can obtain valuable information to improve future learning programs. However, the drawback of this model is that it may require considerable time and resources to conduct an in-depth evaluation.

## **CONCLUSION**

Developing the Disaster Mitigation Training Curriculum from an Islamic Perspective (MBPI) is deemed feasible for implementation, as indicated by a positive response from participants with an average of 88.44% and successful training outcomes with an average score of 88.47. This curriculum integrates Islamic values such as monotheism, worship, and social solidarity into applicable and contextual disaster mitigation materials. Its implementation is expected to enhance the preparedness of Muslim communities in both technical and spiritual aspects. The study recommends that the MBPI curriculum be adopted by national training institutions such as BPBD, BPSDM, and the Ministry of Religious Affairs. Future research should test the curriculum's adaptability and effectiveness across diverse educational settings and regional contexts.

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