

Dissemination of the Free Nutritious Meal Program for Students: Case Study in Rote-Ndao Regency – Indonesia

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ABSTRACT

Introduction: Health has been a priority in Indonesia's development agenda over the past two decades. One initiative is the Free Nutritious Meal Program, launched in early 2025. The program targets students, pregnant women, breastfeeding mothers, toddlers, and other groups vulnerable to nutritional deficiencies. This study examines the educational activities of the Free Nutritious Meal Program for students in Rote Ndao Regency, focusing on educational steps, media use, message formats, media exposure, and the determinants of educational agendas.

Method: This qualitative research employs a case study method, with data collected through in-depth interviews, observation, and documentation. Informants were chosen through purposive sampling, and data was analyzed using methods like Pattern Matching and Explanation Building. These techniques were used to interpret the information from the viewpoints of innovation diffusion and development communication.

Results: The Rote Ndao government has not yet implemented educational activities for the Free Nutritious Meal Program in a planned, direct, and systematic manner. Teachers, students, and parents primarily obtain information about the program independently through media sources. Television remains the most frequently used conventional mass medium, mainly through news broadcasts. In addition, local communities also access program information via new media. Students receive program information primarily in the form of video content, textual news narratives, and oral accounts in daily conversations. Program exposure among students in Rote Ndao Regency is relatively low, at only 14.28%. The implementation of the program's educational activities in the regency remains suboptimal, influenced by several factors, including government educational agendas, media and information accessibility, technological competence, and communication infrastructure.

Conclusion: This study concludes that the educational activities of the Free Nutritious Meal Program in Rote Ndao Regency have not been implemented optimally. It confirms that the program's execution in the regency has prioritized operational stages while neglecting the role of communication variables as a key factor in its success. The findings may serve as a reference for stakeholders to enhance the program's effectiveness in the future, particularly regarding the urgency of an educational agenda.

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INTRODUCTION

Health has been a priority sector in Indonesia's development over the past two decades (1). Health development programs include sanitation initiatives, health subsidies, nutritional support, capacity-building for health workers, and the provision of health facilities and infrastructure. One of the most recent national health programs launched by the government is the Free Nutritious Meal Program. Officially introduced in January 2025, it has been implemented by 190 Nutrition Service Units targeting students, pregnant women, breastfeeding mothers, toddlers, and other nutritionally vulnerable groups (2). As part of the national strategic program, it aims to improve public health and is designed to provide at least one-third of the daily nutritional needs for vulnerable groups (3). To date, the program has been carried out in 26 provinces across Indonesia, from Aceh to Papua. However, in border areas, implementation has been limited, and in some cases, absent altogether. Development programs in these regions face significant challenges, particularly due to difficult geographic conditions and limited communication infrastructure, which restrict access to information (4,5). Rote Ndao Regency, located on Indonesia's southern border facing Australia, consists of a separate island cluster about 108 km from Kupang, separated by sea. These conditions often hinder development efforts in the regency, including health empowerment initiatives.

Table 1. Distribution of Program Beneficiaries in NTT

No	City/Regency	Quantity (People)
1	Kota Kupang	32.352
2	Kabupaten Kupang	8.476
3	Sumba Timur	6.515
4	Rote-Ndao	6.090
5	Ende	6.064
6	Manggarai	4.773
7	Manggarai Barat	2.456
8	Belu	5.678
9	Sikka	3.466
10	Sumba Barat	3.418
11	Sumba Barat Daya	3.165
12	Timor Tengah Utara	3.029
13	Alor	4.163
14	Lembata	3.827
15	Ngada	2.584

Source: Directorate General of Treasury, 2025

Rote Ndao Regency received an allocation of 6,090 beneficiaries for the Free Nutritious Meal Program, launched in early 2025. Local students are among the primary target groups of this national policy. Program implementation for students in the regency has not yet reached full coverage, as it is still limited to pioneering schools. These include schools in Lobalain District, covering multiple levels of education, with 5,755 beneficiaries: 13 elementary schools (2,370 students), 6 junior high schools (1,463 students), and 4 senior high schools (1,662 students). However, most other schools report that they have not received comprehensive information regarding the program's implementation. To date, only student quota data for beneficiaries has been recorded, with no ongoing socialization efforts by the local government. According to the idea of innovation diffusion, spreading program knowledge involves many factors that work together. These include: 1) different steps in sharing knowledge, like planning, doing the work, checking progress, assessing results, and following up later, 2) ways to persuade people, which involve using the right teaching methods, 3) available resources such as the skills of the people who help with empowerment, the facilities and tools needed, and money support, and 4) important technical and real-world factors that affect how well the sharing of knowledge works. If one of these variables doesn't work properly, it can cause problems in sharing information, leading to very little public awareness and dislike (6,7,8). Meanwhile, empowerment communication focuses on making the best use of communication resources. This includes how messages are created

and presented, which channels or media are used, and how audiences are divided or targeted. These various theoretical constructs serve as research references in determining the focus of the study.

This study aims to analyze the implementation of the Free Nutritious Meal Program in Rote Ndao Regency, with a particular focus on its educational activities. The analysis covers communication processes, media used, communicator competence, audience segmentation, information exposure, and other related aspects, all of which determine the effectiveness and success of health education within the program. Specifically, the study seeks to: 1) Map the steps taken by the local government in program education activities. This focus is related to the construction of the stages of knowledge dissemination implementation from the perspective of innovation diffusion, 2) Identify the use of communication media during program education. This focus is related to media optimization strategies in development communications, 3) Examine the forms of program education messages. This focus is related to the formulation of messages in development communication, 4) Analyze media exposure among target groups. This focus is related to audience segmentation in the perspective of innovation diffusion, and 5) Outline factors influencing the effectiveness of program education. This focus is related to the resource variables in the perspective of innovation diffusion. The findings may serve as both an evaluation tool and a constructive recommendation for improving the program's implementation in Rote Ndao, particularly in the educational stage for its target groups. The local government and the Nutrition Service Units, as the main facilitators, can utilize these insights to strengthen educational efforts and ensure the program's success.

METHOD

Type of Research

This study employs a qualitative approach with a case study method. The qualitative approach explores the research object by examining the experiences and meanings of individuals or groups related to the focus of study, with data exposition presented in narrative form (9,10). This study presents the educational activities of the Free Nutritious Meal Program through field data analysis using conceptual and theoretical tools. The case study method serves to examine the research object systematically and in detail within a specific context of space and time (11). This study aims to examine the Free Nutritious Meals program in Rote-Ndao Regency in detail and comprehensively as a unified empirical reality. Case studies are relevant to this research because they limit the researcher to examining events within a specific time and space. This study is situated within the context of the Free Nutritious Meal Program launched in 2025 and focuses on Rote Ndao Regency. This study uses a single case study method which focuses on researching one case unit by considering the uniqueness of the case (12). Researchers examined the dissemination of information on the Free Nutritious Meals program for student groups that took place in Lobalain District because it was the first area to implement the program in Rote-Ndao Regency. This case study research aims to reconstruct the object of study to obtain a complete picture of the construction and modus operandi of the events under investigation. This reconstruction also involves analytical instruments in the form of conceptual and theoretical perspectives to identify the problem, dependent variables, and follow-up plans.

Population and Sample/Informants

Research informants were selected using purposive sampling, in which sources were chosen based on specific criteria (13). The criteria applied were: 1) Having a direct interest in the educational activities of the Free Nutritious Meal Program in Rote Ndao Regency, and (2) possessing experience related to such activities. Accordingly, the selected informants, as shown in Table 2. In Lobalain District, there are 23 schools as program recipient groups from Elementary Schools (13), Junior High Schools (6), and Senior High Schools (4). Specifically, researchers also used cluster sampling to determine the sample of schools as informant groups. This technique selects samples by dividing the population into small groups based on certain areas or characteristics (14). This study selected one school each representing each level of education. Next, the researchers selected five students and a principal from each sample school. Government informants consisted of the head of the Education Office, the head of the Health Office, and the local military district commander who handled the technical implementation of the program. The main informant for implementing the program was the head of the Nutrition Fulfillment Service Unit in the local sub-district. Parent informants were selected from the parents of the students who were informants in this study. This study did not intend to generalize the population, but rather to obtain in-depth data so that the sample claims were sufficiently

representative. Primary data were collected through in-depth interviews, while secondary data were obtained through field observation of program education activities and documentation in the form of visual review of relevant materials. This study uses the Comparative Method for Theme Saturation which measures the saturation of field data by periodically observing the consistency of informant statements (15).

Table 2. List of Research Informants

No	Role	Quantity (People)
1	Students	15
2	Teachers	3
3	Local Government	3
4	Nutrition Service Unit	1
5	Parents	10

Source: Researcher, 2025

Research Location

The research was conducted in Rote Ndao Regency, focusing on schools in Lobalain District, the pioneering area for the Free Nutritious Meal Program since February 2025. In this district, 5,755 beneficiaries are distributed across 13 elementary schools (2,370 students), 6 junior high schools (1,463 students), and 4 senior high schools (1,662 students). This study seeks to confirm and evaluate the penetration of the local government's educational efforts regarding the Free Nutritious Meal Program among beneficiaries.

Instrumentation or Tools

The interviews employed semi-structured question instruments designed to explore information from informants in depth. This technique combines a written guide as an initial framework with improvised oral questions to pursue richer insights from respondents (16). The research team prepared an interview question list derived from each research objective to ensure that information from informants could be systematically categorized. However, the list allowed for independent development by the researchers to pursue deeper insights. During the interviews, researchers also used a recorder to capture responses and writing tools to note key points. An observation guide was developed to direct the researchers' focus toward relevant objects of study. Documentation activities utilized a camera to record both the research objects and the ongoing research activities. In addition, researchers used a questionnaire instrument in the form of a Google form for mini-survey purposes.

Data Collection Procedure

Data collection was carried out separately by distributing members of the research team to interview different groups of informants, including students, local government officials, Nutrition Service Units, and parents. Student, teacher, and parent informants were selected from one elementary school, one junior high school, and one senior high school, considering the team's limited capacity to cover all schools in Lobalain District and available research resources. To optimize time, the team conducted focus group discussions with school and parent informants at each educational level. For elementary students, their parents represented them during the interviews. Data collection at schools also included documentation of activities related to the Free Nutritious Meal Program. Furthermore, interviews were conducted with local government officials and the Nutrition Service Unit as program implementers. The team also gathered and documented relevant statistical data on the program to complement supporting information. Field data recorded during interviews were transcribed to facilitate analysis. Overall, the data collection process was successfully conducted, and the information obtained was relevant to the research focus and theoretical assumptions. In addition, researchers conducted a mini-survey to obtain statistical data to support the qualitative data. The mini-survey used a structured questionnaire to quickly collect numerical data from a small sample (17). The survey sample consisted of existing student and parent informants. The mini-survey instrument used a Google form, filled out by informants and then tabulated only as supporting data.

Data Analysis

The field data collected were analyzed using Pattern Matching and Explanation Building techniques, both commonly applied in case study research. Pattern Matching serves to confirm the alignment between empirical findings and the study’s conceptual or theoretical assumptions (18). Data collected in the field were grouped based on the research objectives, and each data set was examined using relevant ideas and theories. Researchers conceived of this grouping by developing interview questions and generating ideas for observations based on the research objectives. This meant thematizing the field data using the five existing research focuses as a guide. Explanation Building, on the other hand, constructs the reality of the research object as a sequence of empirical events presented in a scientific narrative (19). Using this method, researchers explore the relationships between the five main research objectives and organize them into a clear, step-by-step sequence of events over time. The case reconstruction is explained using appropriate concepts and theories. The use of both methods demonstrates that the researchers carefully explain the research findings, first examining the key elements of the events under study and then piecing them together to understand the entire case.

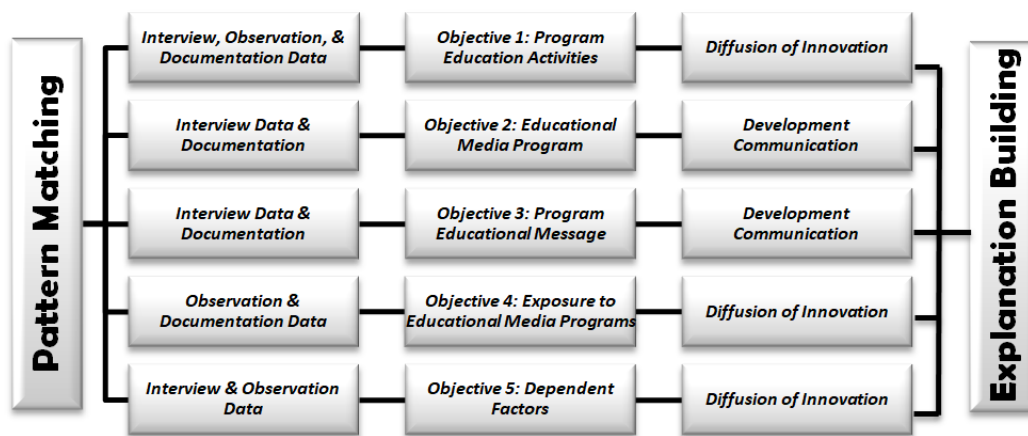


Figure 1. Research Data Analysis Process
 Source: Researcher’s Processing, 2025

Ethical Approval

The study was approved by the Research Institute of Nusa Cendana University (Approval Number: 466/UN15.22/PL/2025). This research activity also has permission from the Rote-Ndao Regency Government through the submission of a research permit letter issued by the research team's home base campus. This permit is followed up with field coordination and a request for the informant group's willingness to provide information, permit field observations, and submit relevant documents. All data collection, compilation of research results, and publication of field findings are the full responsibility of the research team should ethical or legal issues arise later.

RESULTS

First, the Rote Ndao government has not implemented the Free Nutritious Meal Program’s educational activities in a planned, direct, or systematic manner. This was confirmed by school representatives, who are part of the program’s beneficiary groups. Teachers, students, and parents primarily obtain information about the program independently through media sources. However, such information is often inconsistent and fails to provide clarity for recipients. The program’s initial implementation in Rote Ndao Regency took place in February 2025 at State Junior High School 3 Lobalain. The school acknowledged that no educational activities related to the program had occurred prior to its early 2025 rollout. Preparations at the school were limited to compiling lists of student beneficiaries, without accompanying educational initiatives.

'They (the government or implementing team) came to the school only to collect data on the number of students as beneficiaries of the Free Nutritious Meal Program. However, there were no face-to-face meetings, nor did they provide any information regarding the program's implementation. As teachers, we only learned about the program's rollout in Rote through news and social media.' (Teacher Informant)

Confirmation from Student Parents:

'I received information about this program from news media and social media content. There were reports of students getting sick from spoiled food, which made me worry that my child might experience the same at school. As parents, we receive inconsistent information about this activity, so we hope the government can provide proper socialization to ease our concerns about our children participating in the program.' (Parent Informant)

The educational activities of the Free Nutritious Meals program in Rote-Ndoa district consist of distributing information via media obtained independently by the local public through local and online media, as well as various social media content. Both mass media and new media serve as alternative information sources, replacing conventional distribution methods (20),18). Innovation diffusion activities involve the use of diverse communication channels tailored to field needs and audience segmentation. Local communities utilize communication technology to independently seek information about programs due to minimal outreach from the local government. New media provides an alternative information channel for local communities, supported by the technological skills most of them possess. Program information is also disseminated orally through conversations among the local community. This word-of-mouth communication ensures that messages are conveyed effectively in a practical, widespread, and cost-efficient manner (22). This form of communication emphasizes an interpersonal approach that targets effective information dissemination. Disseminating program information through face-to-face meetings with local communities is relevant to the situation on the ground, which includes a lack of government education, limited digital skills, and limited communications infrastructure. Educational activities for the program are particularly urgent given the relatively large number of target groups in Rote Ndao Regency, especially in Lobalain District. This area has 5.767 program beneficiaries, including 13 elementary schools (2,370 students), 6 junior high schools (1,463 students), and 4 senior high schools (1,662 students). Additionally, 272 toddlers from Integrated Service Posts and kindergartens are also beneficiaries, bringing the total number of recipients in the district to 5.767.



Picture 1. Nutritious Meal Activities for Groups at Baa Elementary School – Rote

Therefore, initial preparation through education is necessary for all beneficiary groups to prevent issues during program implementation. Evidence shows that a small portion of beneficiaries refused to participate due to reports of food poisoning incidents among program recipients. Overall, educational activities for the Free Nutritious Meal Program in Rote Ndao Regency were poorly planned and not conducted as a dedicated preparatory step for field implementation. This indicates inadequate program planning and management in the region, as education was not provided as an initial stage. The local Health Office, as the program facilitator, acknowledged that they had no specific agenda for educational activities before the program was rolled out to the community.

Second, educational activities for the Free Nutritious Meal Program among students in Rote Ndao Regency occur independently. Development communication can optimize various communication media to increase the

effectiveness of empowerment messages (23). The more media available, the greater the chance of successfully distributing empowerment messages. Students, teachers, and parents have many alternative communication channels available as sources of program information, including conventional media, new media, and interpersonal communication. Television is the most commonly used conventional mass medium, mainly via news broadcasts. Additionally, the local community accesses program information through new media, particularly Facebook, Instagram, YouTube, and WhatsApp. As of early 2025, information regarding the Free Nutritious Meal Program in Rote Ndao was very limited. A related issue is that not all beneficiaries have the resources to access information across these media platforms, including lack of television or mobile phones, no social media accounts, limited technological literacy, and other barriers.

Table 3. Number of Information about the Free Nutritious Meal Program in Rote Ndao Regency, 2025

No	Category	Quantity
1	Online News	16 Reports
2	Facebook	11 Posts
3	Instagram	21 Posts
4	Youtube	5 Videos

Source: Researcher, 2025

Table 3 shows the penetration of information on the Free Nutritious Meals program in Rote-Ndao from various social media sources. However, the quantity of related information is relatively minimal and therefore inadequate to complement the limited education provided by the local government. This limitation results in ambiguous program information, potentially leading to resistance and rejection of the program in the field. Conversely, empowerment communication needs to ensure the completeness and clarity of distributed messages to persuade target groups (24). Independent educational activities conducted by program beneficiaries were also ineffective due to limited information on the Free Nutritious Meal Program’s implementation in the local area. The dynamics of using communication media as a source of program information among the Rote Ndao community indicate a lack of involvement from the local government in preparing a more coordinated program rollout. The program was implemented directly to beneficiaries without prior socialization activities.

‘I learned about this program mostly through social media platforms such as Facebook, Instagram, WhatsApp, and YouTube. We were informed that students in Rote Ndao Regency would receive daily meals. I also saw news about it on television several times. Previously, the only notice came from our teachers that the program would be implemented. There was no education provided by the government, except through the school, and suddenly the program was already running at my school.’ (Student Informant)

Students received information passively, learning about the program’s implementation only when it appeared in news media or social media posts. Despite having substantial resources, the local government has been unable to optimize available communication media for educational purposes related to the Free Nutritious Meal Program.

‘This program is implemented as a complete, phased sequence. As the primary executors, we are no longer burdened with educational activities; that responsibility lies with the local government, which has a better understanding of field conditions. Ideally, program beneficiaries should be provided with adequate understanding to prevent rumors and refusal due to lack of information. Therefore, the Rote Ndao government can utilize various communication media to deliver educational information to the community. This depends on their commitment and careful planning to ensure socialization occurs before program execution.’ (Nutrition Service Unit Informant)

Third, students primarily receive information about the Free Nutritious Meal Program in the form of video content, textual news narratives, and oral accounts in daily conversations. Videos and textual narratives are accessed via television and various social media platforms, including Facebook, Instagram, YouTube, and WhatsApp. Students tend to prefer video formats for their practicality, whereas teachers and parents favor textual narratives for their depth of information. The choice of communication message format depends on audience typology and consequently affects the effectiveness of message reception (25). Interestingly, the most widely distributed message format among program beneficiaries is oral information. The Free Nutritious Meal Program in Rote Ndao Regency has become a

topic of discussion not only by the government but also within the community through conversations and informal discussions.

'As parents of students participating in this program, we maintain ongoing communication with the school. We seek clarity about the program and want to ensure that the meals provided to our children do not cause problems. When the program was introduced in Rote, we regularly discussed its purpose and implementation with teachers. This was necessary because we had heard reports of spoiled food causing food poisoning elsewhere. The Rote government provided no prior socialization, so we relied mostly on teachers at school to obtain information.' (Parent Informant)

Oral information has become the primary source for students, teachers, and parents to learn about the Free Nutritious Meal Program due to the lack of government socialization and limited available information. In other words, oral discussions enable the community to share and update information promptly, helping them decide whether to accept or reject the program. Health information is highly sensitive, as it directly relates to human safety and allows virtually no margin for error. Empowerment communication plays a role in increasing people's abilities and potential as capital for future life. Therefore, empowerment messages can function in various ways, including informative, educational, assertive, motivational, and others, to transform attitudes and behaviors (26). In reality, most of the program information in the Rote-Ndoa district is in the form of information only and does not have strong persuasive power.

Fourth, exposure to information about the Free Nutritious Meal Program in Rote Ndao Regency is relatively limited. This is due to the absence of systematic educational activities from the local government and low community accessibility to available communication media. The acceptance of innovation by empowerment groups is influenced by the level of exposure to media and empowerment information. Knowledge is the basis for evaluating and determining attitudes toward adopting innovation (27). Most student beneficiaries lack clear knowledge, particularly regarding program preparation at their schools. Among all sources, students and parents receive clear and reliable information only from the schools. Table 4 shows the distribution of communication media exposure by local empowerment groups, which is dominated by new media exposure (cumulative 83%). This means that the penetration of new media as a source of information about the Free Nutritious Meals program in the local area is relatively significant. These data also indicate that face-to-face (oral) communication channels are an alternative for local empowerment groups to obtain program information. Meanwhile, Table 5 shows the categorization of message content related to the Free Nutritious Meals program accessed by the target group. This grouping is filtered primarily from media publications related to the program's plans and implementation in Rote-Ndao Regency, where only 53 pieces of relevant information were found.

Table 4. Level of Educational Media Exposure Among Students

No	Media	Percentage
1	Print Media	3%
2	Online News	20%
3	Facebook	25%
4	Instagram	18%
5	Youtube	20%
6	WhatsApp	4%
7	Oral Communication	10%

Source: Researcher, 2025

Table 5. Categorization of Educational Information

No	Topic Information	Quantity
1	Policy on the Free Nutritious Meal Program	15
2	Preparation & Technical Coordination for Program Implementation in NTT	13
3	Beneficiary Group Data Collection	12
4	Program Implementation in Rote Ndao	8
5	Program Implementation Monitoring	5

Source: Researcher, 2025

Fifth, the educational efforts of the Free Nutritious Meals program in Rote-Ndao Regency also faced various challenges. The initial steps to introduce the innovation, which involved disseminating knowledge, faced obstacles, including program characteristics, communication channels, and socio-cultural variables (28). Local program beneficiaries have not been adequately educated, as the government did not prepare them through socialization activities. As a result, they rely more heavily on communication channels, particularly publications from new media. This has led to public resistance and rejection of program implementation in local areas. Among the reasons some parents rejected the program was the lack of clear information from the local government. Media reports of poisoning cases and issues with the quality of the Free Nutritious Meals fueled resistance. Knowledge dissemination plays a crucial role in shaping awareness and positive attitudes among empowerment subjects toward the program (29).

‘Information about the Free Nutritious Meal Program is difficult for us to obtain because there is very little information available. We rely heavily on media coverage, as the government itself does not provide clear information. Most of what we receive comes from newspaper reports, WhatsApp messages, and social media, which are also limited in quantity. As a result, the program appears to have been implemented directly without prior socialization, so not all students and parents are willing to participate.’ (Teacher Informant)

Another obstacle is the minimal level of media exposure and information about the Free Nutritious Meal program for the program recipient group. Students, teachers, and parents in Rote Ndao Regency acknowledge their difficulties in accessing media and information related to the Free Nutritious Meal Program. In particular, not all parents are technologically literate, and ownership of media devices hinders the monitoring of their children, the program's recipients. This situation is exacerbated by the lack of routine educational efforts by local governments. Rote Ndao Regency, as Indonesia's southern border region, lacks adequate communication infrastructure, which hinders the dissemination of educational information. Communication facilities and infrastructure serve as complementary variables that support successful development, especially in relation to information distribution (30). Rote-Ndao Regency is the outermost southernmost territory of Indonesia and an archipelago, accessible primarily by sea transportation. This region's varied geography poses significant challenges to development efforts, including the availability of communications infrastructure. Many blind spots exist in Rote-Ndao Regency, hampering the accessibility of program information.

‘This program seemed to be implemented hastily, causing us as program facilitators to neglect educating the community beforehand. By early 2025, the program was already underway, and the local government had to execute it without giving us time for prior socialization. The community mostly obtained information from news media and social media, but the information was often unreliable and confusing. As a result, in some schools, a small portion of students and parents refused to participate due to the lack of valid information. The government should serve as the primary source of information to reassure the community. This is a problem we intend to evaluate to ensure the program's successful implementation in the future.’ (Government Informant).

DISCUSSION

Education serves as the initial stage of every empowerment process and plays a crucial role in determining the success of development agendas. The public needs to be well educated to form a positive response to the innovative programs offered to them (31). This should be an integral part of the Free Nutritious Meals program. Disseminating knowledge builds public awareness and encourages positive acceptance of the innovations offered. Innovations need to be well-communicated, as they encompass aspects of relative advantage, compatibility,

complexity, triability, and observability (32). These variables form the basis for public consideration before adopting an innovation, and therefore, they need to be conveyed through effective communication. Therefore, communication is a variable that requires careful planning before adoption. Communication aspects that are prepared include: the competence and capabilities of program facilitators, persuasive message formulation, appropriate use of media, audience segmentation, and effective feedback responses (33). Free Nutritious Meals is an empowerment program that involves active participation from program recipient groups. They are not seen as program objects but are involved in empowerment activities through intensive, ongoing communication between program facilitators and the community. Communication facilitates the transfer of knowledge, which forms awareness, which then encourages changes in attitudes and behavior that determine the key to the successful implementation of an innovation (34). Thus, the local government's neglect of education in the Free Nutritious Meals program stems from a lack of thorough planning. Communication is not positioned as a critical variable, but rather focuses on the technical aspects of program implementation in the field as a measure of success. This problem is technical in nature and can therefore be conditioned by the commitment and commitment of stakeholders with adequate resources.

The community needs to the implementation of the Free Nutritious Meal Program for students in Rote Ndao Regency highlights the neglect of the educational stage that should have been conducted by the local government. Students, teachers, and parents did not receive sufficient or clear information regarding the program's implementation in local schools. Instead, program beneficiaries obtained information independently and incidentally through mass media and local news. New media can function as a substitute for the scarcity of information provided via conventional communication channels (35). This study found that the program's chances of success can be enhanced through a combination of government education, mass media publications, and social media information. With digital technology, empowerment communication can be effective, supported by media convergence. As of early 2025, there were only 53 news and social media content items and 5 categories of information related to the program's implementation in Rote Ndao Regency. Such a level of information exposure is considered inadequate to educate the community about the program. Moreover, field conditions, including technological literacy and the availability of communication infrastructure in Rote Ndao, further limit media and information accessibility. In fact, media utilization and message accessibility are critical variables that determine the success of development initiatives (36,37). In 2025, Rote-Ndao Regency ranked fourth out of 21 regencies/cities in the NTT region in terms of information literacy and digital media. This means that the local community has relatively good skills in accessing and processing information media. The study found that the root of the problem lies in the availability of information on the Free Nutritious Meals program, resulting in low levels of information exposure. Therefore, program initiators need to ensure the availability of information and its widespread and equitable distribution to the community. Furthermore, communication infrastructure, in the form of numerous blind spots, increases the level of information exposure in the local area. This problem can be addressed through prioritizing communication infrastructure development that will improve network connectivity throughout the region. The success of the Free Nutritious Meals education program in the outermost southern regions of Indonesia is estimated to be due to at least three mutually supporting variables: literacy competency, availability of public information, and communication infrastructure. This third part functions as a communication pattern that determines the success of the program's implementation, particularly in cases in border regions. This study provides a general overview of the dynamics of empowerment communication across Indonesia's border regions, but with specific case studies for each region. Furthermore, it provides both substantive and technical recommendations that underscore the crucial role of communication variables in the implementation of government policies, particularly the Free Nutritious Meals program in Rote-Ndao Regency.

Limitations and Considerations

This study was conducted with full awareness of its inherent limitations. *First*, the implementation of the Free Nutritious Meal Program in Rote Ndao Regency has not yet targeted all program beneficiaries, particularly all schools in the area. Therefore, the study's findings cannot be generalized to the entire region. *Second*, the study was conducted within a relatively limited spatial and temporal scope, affecting the sufficiency of data to support scientific claims regarding the examined reality. *Third*, the research took place during the early stages of program implementation, when preparatory and execution activities were still inadequate—particularly the local government's failure to conduct program education alongside the independent education efforts carried out by the beneficiaries.

This issue affects the study's findings concerning the reconstruction of the program's educational effectiveness in Rote Ndao Regency.

The local government needs to prioritize and implement a routine educational agenda for program beneficiaries. Independent education as an alternative effort does not guarantee the formation of positive attitudes toward the program. Program refusal due to insufficient knowledge is a technical issue that should be addressed through continuous educational efforts. Education represents the initial stage that plays a decisive role in determining the success of the Free Nutritious Meal Program in Rote Ndao Regency.

Recommendations for Future Research

There are several recommendations for future studies to follow up. *First*, similar research should cover a broader range of subjects and objects to produce valid scientific findings that can be generalized appropriately. Informant samples can be expanded to include various categories of program beneficiaries across different regions of the regency, ensuring greater representativeness. *Second*, future studies could be conducted over a 2–3 year period to examine the research reality more comprehensively. The Free Nutritious Meal Program in Rote Ndao Regency has been implemented for less than one year, so the full sequence of program activities has not yet been completed. *Third*, research on the Free Nutritious Meal Program from a development communication perspective remains scarce. Therefore, future studies should actively explore this program within the scope of communication research.

CONCLUSIONS

This study found that the educational activities of the Free Nutritious Meal Program in Rote Ndao Regency have not been optimally implemented. The local government did not schedule program socialization for the target groups, resulting in a small portion of beneficiaries refusing to participate. In particular, most school students as program recipients lacked sufficient knowledge and understanding of the Free Nutritious Meal Program. Students, teachers, and parents relied on mass media and new media as alternative channels to educate themselves independently. This situation is exacerbated by field findings showing limited information on program implementation in the area. The study also indicates that low media literacy and inadequate communication infrastructure in Rote Ndao Regency hinder media accessibility and program information exposure. This confirms that program implementation in Rote Ndao prioritizes execution stages while neglecting the role of communication as a key variable for success. Research on the Free Nutritious Meal Program from a communication perspective is currently nonexistent. The findings of this study are expected to contribute empirically and theoretically to development communication research. Practically, they provide recommendations for stakeholders to support the successful implementation of the program in the future, particularly regarding the urgency of an educational agenda. The Free Nutritious Meal Program is considered a government policy with significant societal impact, necessitating careful preparation. All program variables should be optimized so that the program, as an integrated series of activities, can be effectively implemented and achieve its objectives.

AUTHOR CONTRIBUTION STATEMENT

The author contributed to the research by designing the study, including defining the scope, formulating the research focus, selecting the theoretical perspective, establishing the methodology, and preparing interview and field observation guides. The author also collected and organized field data, conducted data analysis, and prepared the research report and manuscript. All stages of the research were planned, monitored, and evaluated to ensure the quality of both the research process and its findings. The author takes full responsibility for the content of this manuscript, affirming that the article was prepared in accordance with applicable guidelines and ensuring the originality of the work.

CONFLICT OF INTEREST

This study was conducted independently, based on scientific principles, and in strict adherence to established research methodology, without influence from funding sources or any external parties. The dissemination of the study's findings through journal publication was carried out honestly and in accordance with standard publication procedures.

DECLARATION OF GENERATIVE AI AND AI-ASSISTED TECHNOLOGIES IN THE WRITING PROCESS

This manuscript was prepared without the use of any AI tools, ensuring its reliability at a later date. The author's writing was independently developed based on field data and relevant concepts/theories as analytical instruments. The language of the manuscript was also creatively formulated, adhering to standard grammar.

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AUTHOR'S CONTRIBUTION STATEMENT

MM formulated the overall research design, directed the project, validated the research procedures, supervised all stages of the study, and led the preparation of the manuscript. AS supported the development of the methodological framework and participated in data analysis and interpretation. HNW contributed to data collection and ensured that field implementation followed the established research procedures. MM also carried out the critical revision of the manuscript and confirmed the coherence of the final document. All authors have read and approved the final version of the manuscript prior to submission.

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