

# Midline Study Report



## Joint Action to Overcome Malnutrition in North Lombok District 2019

Prepared for Nurani Luhur Masyarakat Foundation

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Prepared for:

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# Chapter 1

## Background

# Chapter 1. BACKGROUND

West Nusa Tenggara Province (NTB) once became the center of national attention for malnutrition in 2005. This issue occurred due to economic problems and parents' low education level. Inadequate level of education causes many parents to ignore the nutrition needed by their children.<sup>1</sup> The malnutrition will impact the high mortality rates in infants and babies and their low life expectancy. Malnutrition also affects low participation in school, low education level, and slow growth.<sup>2</sup>

Almost 15 years after the malnutrition issue in 2005, the malnutrition problems still exist and need more attention, especially in North Lombok district. The data from the NTB Provincial Health Office (2017), as seen in Table 1.1, indicates that North Lombok district is a district with the highest percentage of underweight and malnourished babies in NTB Province. In total, there are 7% of underweight and malnourished babies from the total baby born in the district. This number is significantly higher compared to other regions in Lombok, which are directly in borders with the North Lombok district.

In line with the high percentage of the underweight and malnourished babies, the data from TNP2K (2017) shows that North Lombok district is also a district with the highest stunting prevalence in NTB province, as seen in Table 1.2.

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<sup>1</sup> Hafizah and Ghazali (2010), Profil Gizi Buruk pada Balita di Kabupaten Lombok Utara, Medical Faculty of Universitas Islam Indonesia.

<sup>2</sup> Siswono (2005), Kasus Gizi Buruk, "Kunuran" Bagi Bayi di NTB

**Table 1.1: Underweight and malnourished babies in NTB province**

District/City		Baby born	Underweight baby	%	Malnourished baby	%
District						
1	West Lombok	13.794	565	4,10%	90	0,65%
2	Central Lombok	19.222	782	4,07%	38	0,20%
3	East Timur	26.616	978	3,67%	112	0,42%
4	Sumbawa	8.995	470	5,23%	27	0,30%
5	Dompu	5.440	158	2,90%	27	0,50%
6	Bima	9.871	287	2,91%	29	0,29%
7	West Sumbawa	2.833	112	3,95%	1	0,04%
8	North Lombok	4.540	317	6,98%	22	0,48%
City						
9	Mataram	8.451	275	3,25%	42	0,50%
10	Bima	3.370	128	3,80%	15	0,45%
<b>WEST NUSA TENGGARA</b>		<b>103.132</b>	<b>4.072</b>		<b>403</b>	

**Table 1.2: Stunting prevalence in NTB province**

District	Stunting Prevalence
West Lombok	46,89%
Central Lombok	47,79%
East Lombok	43,77%
Sumbawa	50,30%
Dompu	47,78%
North Lombok	65,77%

Source: TNP2K and the Ministry of National Planning and Development/  
BAPPENAS (2017)

Furthermore, the data from TNP2K (2017) stated that ten villages in Lombok Utara district are parts of 1,000 communities in 100 stunting priority districts/cities in Indonesia. From the ten villages mention above, three of them are in Bayan sub-district.

**Table 1.3: Ten villages with stunting priority in Lombok Utara District**

North Lombok	Sub-district
Jenggala	Tanjung
Sigar Penjalin	Tanjung
Rempek	Gangga
Kayangan	Kayangan
Sesait	Kayangan
Dangiang	Kayangan
Sukadana	Bayan
Mumbul Sari	Bayan
Karang Bajo	Bayan
Pemenang Timur	Pemenang

Source: TNP2K and the Ministry of Ministry of National Planning and Development/BAPPENAS (2017)

Bayan sub-district is the northern most sub-district in North Lombok district, and located 40 km from the district center. It is also the largest sub-district, covering approximately 41% of the total area of North Lombok district (North Lombok Utara in Numbers, 2018). There are nine villages in Bayan sub-district, including Sukadana and Anyar, which have the most significant population of children aged 0-4 years. In addition, Akar-Akar, Senaru, and Mumbul Sari are the remotest villages from the sub-district center.

**Table 1.4: Bayan sub-district profile**

Villages of Bayan Sub-District	Population	Children under 4 years old	Distance from Sub-district' s center
Akar-Akar	6.927	770	10
Sukadana	7.890	926	5
Anyar	8.229	823	0
Senaru	6.724	791	10
Bayan	4.741	454	5
Loloan	4.375	490	6
Mumbul Sari	3.627	389	11
Sambik Elen	3.467	461	8
Karang Bajo	3.365	361	4

Source: Bayan District in Figures, BPS (2019)

In 2018, Bayan sub-district had a relatively higher stunting prevalence where all villages in the sub-district mounted above the Lombok Utara district average prevalence, i.e., 34% (BAPPEDA, 2019).

**Table 1.5. Stunting prevalence in every village on Bayan sub-district-2018**

Villages of Bayan Sub-District	Stunting prevalence in 2018
Akar-Akar	36,20%
Sukadana	53,90%
Anyar	40,50%
Senaru	41,50%
Bayan	37,40%
Loloan	40,20%
Mumbul Sari	43,10%
Sambik Elen	34,50%
Karang Bajo	46,50%
<b>Average</b>	<b>34%</b>

Source: BAPPEDA of North Lombok Regency (2019)

In terms of stunting children, four villages in Bayan sub-district have exceeded the number of district average. These villages are Sukadana, Senaru, Anyar, and Akar-akar as seen in Table 1.6 as follows

**Table 1.6: Villages exceeding the average number of stunting children**

Village with number of stunting children above district's average				
No	Sub-district	Village	Number of stunting children	Stunting prevalence
1	BAYAN	SUKADANA	317	53,91
2	PEMENANG	PEMENANG BARAT	362	43,77
3	BAYAN	SENARU	250	41,46
4	KAYANGAN	SELENGEN	182	40,81
5	BAYAN	ANYAR	221	40,48
6	KAYANGAN	GUMANTAR	183	40,31
7	GANGGA	REMPEK	224	40
8	TANJUNG	TANJUNG	211	36,95
9	BAYAN	AKAR AKAR	201	36,22
10	GANGGA	SAMBIK BANGKOL	217	35,93
11	TANJUNG	SOKONG	329	34,7
12	PEMENANG	MALAKA	307	33,3
13	GANGGA	BENTEK	213	32,13
14	GANGGA	GENGGELANG	313	30,18
15	GANGGA	GONDANG	237	29,96

Source: BAPPEDA Lombok Utara District (2019)

The situation in Bayan Sub-district requires the attention of various stakeholders so that the malnourished children and babies under three years old can be immediately addressed. This case also became one of the reasons why the Nurani Luhur Masyarakat Foundation (later referred to as YNLM) choose Bayan sub-district as the target area of this Joint Action Program.

YNLM is a non-profit foundation engaged in community empowerment, with a focus on activities for child welfare, public health, and improvement of the community's economic condition. YNLM has currently run a project for three years (2018-2020) in Bayan Subdistrict, specifically in three villages, i.e. Sukadana, Anyar, and Loloan. The focus of the Project is to eradicate malnutrition and improve the growth and welfare of children under three years old as its general goal.

The project uses a positive deviance approach, which believes that there are children at the same age level and at the same economic background who have never experienced malnutrition. On the other hand, some children are struggling with it. A lesson that can be acquired from the children who have never experienced malnutrition will be explained more in this study. This study is a mid-line study conducted to provide input to the project so that the implementation of the program in the future will be much better.

With this background in mind, this mid-line study is conducted with the following objectives:

1. **Learning and improvement:** to provide input to the project based on the experience within the first 1.5 years of program implementation.
2. **Accountability:** to evaluate to what extent this project has been implemented in accordance with the plans and resources they have, from the beginning of the project, when the earthquake occurred, until the current time.
3. **Decision making:** to discuss the strengths and weaknesses of the project, and to give more input to decision-makers on how to implement this program much better.
4. **Impact measurement:** to discuss the positive and negative impacts of this program implementation to the beneficiaries.

5. **Further** actions: to understand how the earthquake in Lombok affects the achievement of the project's objectives and to give recommendations for further actions.



## Chapter 2

# Methodology

## Chapter 2. METHODOLOGY

This study used a qualitative data collection method to answer the question of this mid-line study. The data were collected from in-depth interviews, focus group discussions, and ethnography survey (observations and in-depth interviews). Thus, the data collected are more reliable since the data from the same topic are acquired through three different data collection techniques with various sources (triangulation), as shown in Figure 2.1.

Figure 2.1. Qualitative-triangulation research design



### Qualitative research design

In this study, the data were taken from various participants at the village, sub-district, and district levels. The In-depth interviews are for six groups of participants, i.e., beneficiaries, village-level health officers/members, district-level health center officials, village heads, district health offices, and YNLM staff.

Meanwhile, the focus group discussions were for beneficiary mothers in the three villages: Anyar, Sukadana, and Loloan, each with two focus group discussions per village. In addition to the in-depth interviews and focus group discussions, the beneficiary mothers were also observed in terms of their living environment and feeding pattern. The number of in-depth interviews, focus group discussions, and ethnography conducted is shown in Table 2.1.

**Table 2.1: Interviewees and quantity**

<b>Interviewees</b>	<b>IDI</b>	<b>Ethnography</b>	<b>FGD</b>
Beneficiaries*	9	9	6 Groups
Village level Health Officers/Cadres	6	-	
District level Puskesmas staff	1	-	
Village heads	3	-	
District Health Office	1	-	
Internal YNLM Staff	3	-	
<b>TOTAL</b>	<b>23</b>	<b>9</b>	<b>6</b>

The definition of beneficiaries in this study is the mothers who have children under three years (0-36 months) and pregnant women who are targeted by this program. The sample mothers joined this program after door to door persuasion of the YNLM captains. These mothers were then categorized into two groups: mothers with well-nourished children, and mothers with malnourished children. The interviews were carried out at the mothers' houses where the observations also took place regarding their home environment as well as further discussions related to the feeding patterns for children aged 0-36 months old. The mothers welcomed the Myriad interviewers and enthusiastically answered their questions.

For other participants such as Village Health Officers, Health Center Officers, Village Heads, and Provincial Health Offices, their participations were supported by YNLM staff, then followed up by Myriad Interviewers. The data of this study were compiled from September 24 until October 5, 2019.



## Chapter 3

## Result

# Chapter 3. RESULT

This chapter explains the results of the mid-line study, which consists of six subchapters, i.e., nutrition provision pattern, program implementation, program accountability, program strengths, program weaknesses, the impact of the program, and program sustainability.

## 3.1 Nutrition Provision Pattern

The nutrition provision pattern on children aged 0-36 months at the study location is compiled from in-depth interviews, observations of the mothers and their homes, including observations of their kitchen and family dining room conditions, and focus group discussions. From the interviews, observations and group discussions, there are significant different patterns in nutritious food provision for well-nourished children compared to malnourished children.

Mothers with well-nourished children generally breastfed their children until the age of two years old. Children who were still breastfed also consumed complementary food, such as carrots, potatoes, spinach, bananas, papaya, eggs, fish, chicken, *tempe*, and tofu. The food was cooked creatively by their mothers so the children will not get bored with their food. The mothers in this group were more creative in cooking food ingredients. For instance, they made tofu nuggets, *tempe*, pudding, or fish meatballs. Children regularly ate three times a day, and the menus did not contain additional flavoring like MSG. Further research on the mothers with well-nourished children also finds that the mothers had already understood the reason why MSG was not appropriate for their children. The mothers obtained information about the impact of MSG for their children from the cadres of Posyandu (pre- or post prenatal health care and information) and the YNLM team.

On the other side, this study also identified the characteristics of mothers with children whose weight were on the yellow line or under the red line. In these groups, the mothers breastfed their children only until the age of 3-6 months old. After that, the children were fed with solid food. Further research on the interviews and discussion conclude that this kind of action occurred because of the habit passed down from the previous generation. The

mothers said that their mothers taught them to give solid food to their children when they were 3-6 months old.

Another finding from this group of mothers is the irregular eating patterns in their children. The children often ate irregularly. They sometimes skipped breakfast or dinner. As a replacement, the children were allowed to have snacks from their parents. Thus, snacking has become their habit. This habit has also been positively confirmed by Sukadana Village Secretary.

*"Their parents are less creative in cooking the menu. Thus, the children often snack rather than eating homemade food. If the children do not want to eat the homemade food, the parents will buy them some snack from the convenience store and the parents will not be bothered as long as their children do not cry"* **Sukadana Village Secretary.**

There is also a tendency of the mothers in this group to use MSG on their food. The mothers stated that their food would be more delicious, and their children's appetite would increase if they added MSG. In this case, a lack of knowledge becomes another reason why the mothers used MSG on their food other in addition to the habit factor.

The summary of the different habits of mothers who have well-nourished children and malnourished children (on Yellow Line and below the Red Line) can be seen in Table 3.1.

**Table 3.1. Mothers' Habit of well-nourished vs malnourished children**

Well-nourished Children	Malnourished children
<ul style="list-style-type: none"> <li>• Children are breastfed until 2 years old</li> <li>• Children regularly eat 3 times a day, added with complementary food such as fruits and vegetables.</li> <li>• For children who are still breastfeeding, they are also given other food such as rice, carrots, potatoes, spinach, banana, papaya, eggs, fish, chicken, tempeh, and tofu</li> <li>• The menu are varied and change every day</li> <li>• Reduce the use of MSG in food making process</li> <li>• The parents are more creative in creating new menus for their children</li> </ul>	<ul style="list-style-type: none"> <li>• Children are breastfeed only until 3-6 months old, and then directly fed with solid food.</li> <li>• Children eat irregularly</li> <li>• If the children do not want to eat, they buy snack</li> <li>• Snacking has become a habit</li> <li>• Using MSG to their food</li> </ul>

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Further analysis regarding the background of the mothers is compiled through interviews, group discussions, and observation. Qualitatively, it can be concluded that the difference between well-nourished versus malnourished children does not depend on family economic conditions. Qualitatively, the education background of their mothers seems to be a distinguishing factor between the two groups.

The mothers of well-nourished children mostly graduated from high school or college diploma programs, while the mothers of malnourished children mostly had lower education levels as some of them had never been enrolled to formal schools. Some even only graduated from elementary schools, and junior high schools. From the observation of the mothers' house conditions and facilities, the two groups of mothers were quite similar in terms of economic status, i.e., from lower to middle economy class.

Another thing that needs attention is that, qualitatively, some mothers of the malnourished children got married at an early age. This phenomenon caused the mothers to get direction or supervision from their parents in parenting and childcare. The passed down habits in the family were then naturally practiced by these young mothers, including the provision of solid food at a very early age.

**Table 3.2. Mothers' characteristics of well-nourished vs. malnourished children**

<b>Well-nourished Children</b>	<b>Malnourished children</b>
<ul style="list-style-type: none"><li>• The last education level of the mothers is senior high or diploma.</li><li>• The family economic condition varied from low to middle class. This can be seen from their homes' condition and facilities.</li></ul>	<ul style="list-style-type: none"><li>• The education level of the mothers usually lower, some of them are not even admitted to the formal school while another graduate from elementary school or junior high</li><li>• In some cases, the mothers married at the early age</li><li>• The economic condition are varied from lower to middle class.</li></ul>

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## 3.2 Program Implementation

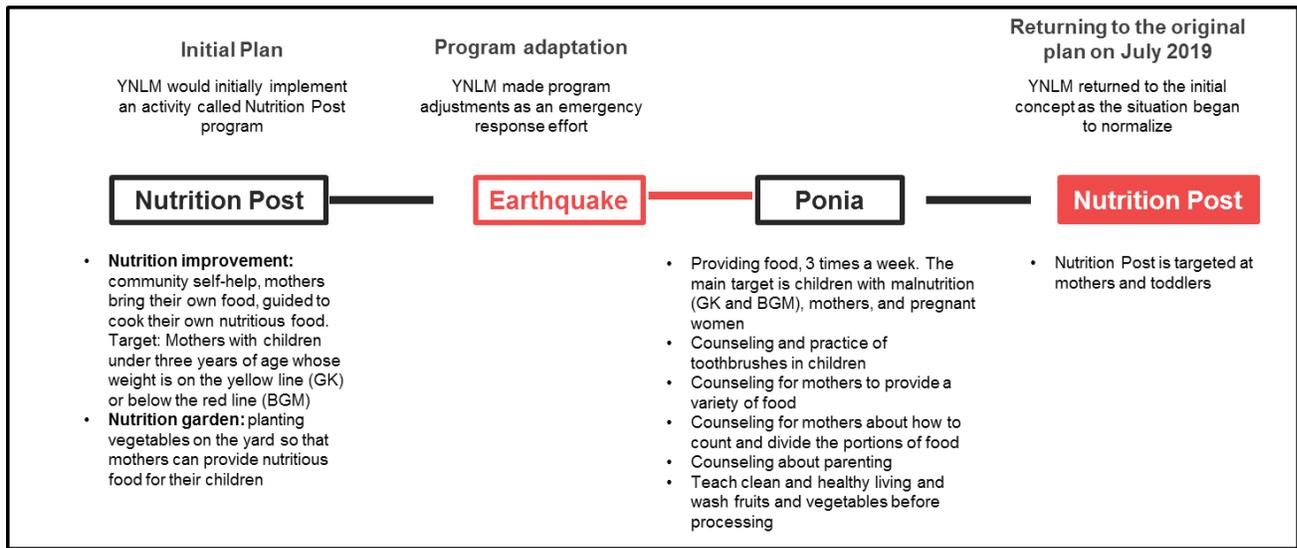
The earthquake that occurred in July 2018 at Lombok Island significantly affected North Lombok district, which caused the YNLM to adapt to the program it ran. In the beginning, YNLM would like to implement the Nutrition Post Program. In this program, YNLM encourages the mothers' independent participation in bringing food ingredients for their children who were under three years old. The mothers were guided to create various menus from various ingredients for their children. The target of this program were the mothers with children under three years old on the Yellow Line or below the Red Line. In addition to this Nutrition Post Program, YNLM also encouraged mothers and villagers to plant some vegetables so that the mothers could harvest nutritious ingredients for their families. This program was called Nutrition Garden.

YNLM was on the preparation stage when the earthquake hit the area. Thus, YNLM made adjustments on the program for emergency response activities, called Ponia. Ponia consists of various activities, such as food delivery, three times a week, for malnourished children (on Yellow Line and below the Red Line), mothers, and pregnant women as its primary targets. Besides, there was also food provision for ten consecutive days for children under the Red Line, counselling for mothers to provide a variety of food, and how to calculate and divide the food portion. Next, there was also counselling about a fostering pattern, as well as healthy and clean lifestyles, such as toothbrushing for children, fruit, and washing fruit and vegetables, before being eaten or processed.

After the emergency response time was over, in June 2019, YNLM returned to the initial plan by implementing the Nutrition Post Program. The Nutrition Post Program was for mothers and children under 3 years old, while the Aquaponic Program was for the youth in three villages.

In brief, the implementation chronology of the program in all three villages run by YNLM can be seen in Figure 3.1.

Figure 3.1. YNLM Nutrition Improvement Program



Qualitatively, this study explores to what extent the beneficiary mothers on all three villages knew and understood the Program run by YNLM. These beneficiary mothers mostly remembered and understood many things that YNLM had done. These mothers' comprehension was seemingly similar in all three villages, as seen in Table 3.3. From the table below, it appears that the beneficiary mothers knew and remembered many things that YNLM had done, not only for themselves, their children, and pregnant mothers but also the activities aimed for the youth in their village.

**Table 3.3: Beneficiaries' knowledge related to the YNLM Program**

Beneficiaries	Activity During an Earthquake	Village		
		Anyar	Sukadana	Loloan
Affected Families	giving blankets, diapers and milk	V	V	V
	<b>Post-Earthquake Activities</b>			
Children	1. Nutrition: Ponia and Nutrition Post Program			
	Providing nutritious food	V	V	V
	Weighing and measuring the height	V	V	V
	2. Hygiene:			
	Washing hand	V	V	V
	toothbrush	V	V	V
	3. Sanitation:			
	Defecate in Toilet	V	V	V
	4. Growth and development			
	Playing with educational games			V
	Reading books for children and mothers.			V
Mothers and Pregnant women	1. Nutrition – Ponia program			
	Providing nutritious food for mothers and pregnant women	V		V
	Counselling to reduce the use of MSG	V	V	V
	Nutrition Garden	V	V	V
	Supplemental Nutrition Program (PMT)	V	V	V
	Improved nutritional of pregnant women until postnatal care	V	V	V
	Healthy food Serving	V	V	V
	2. Nutrition- Nutrition Post Program			
	Counselling on how to cook nutritious food	V	V	V
	3. Disaster response and first aid	V	V	V
	4. Counselling about immunization and growth and development	V	V	V
	5. Parenting: Communication and Child care	V	V	V

These are two statements given by the beneficiaries' mother regarding YNLM program.

*What has been taught by YNLM is very useful because from there, I know a lot about healthy living and how to process healthy and nutritious food" **some mothers in three villages***

*"PONIA has guided me on how to cook vegetables and to prepare the vegetables. The vegetables as the cooking ingredients should be washed with flowing water" **some mothers in three villages***

The following is the example of the food prepared by a beneficiary mother during the observation, i.e., porridge was cooked with carrots, as seen in Figure 3.2.

**Figure 3.2. Example of food made by a mother during the observation**



### 3.3 Program Accountability

Based on the interviews and field observations, it can be concluded that the YNLM Team at the Project site had conducted the program according to the plan even though they need to adjust the program's implementation when the earthquake hit the area. This study also identifies the limitations of human resources that handled this Program, both in terms of quantity and capability. This situation needs to be a concern for YNLM Management at the central level. The accountability analysis of the program was conducted at the three stages of the program implementation, as seen in the following three tables. At the early stage of the program, the preparation was carried out according to the initial plan. However, its application was postponed due to the earthquake, which suddenly hit the area. The preparation stage conducted by the YNLM Team included strengthening the members and piloting several target villages related to nutrition post for mothers with children on Yellow Line and below the Red Line.

**Table 3.4. Accountability in the initial stage of the project**

The initial stage of the project: Normal Situation		Is it as the initial plan?		Notes
Planned Program	What is the execution?	Yes	No	
Nutrition Post: for mothers with children on Yellow Line and below the Red Line	Preparation stage	V		
	Member Strengthening	V		
	Piloting in some target villages	V		
	Implementation		V	Earthquake in Lombok 2018 The program stopped for about a month

In the second stage, Ponia program was also conducted successfully according to the plan. The targets of this program could also be achieved well, i.e. mothers with children on Yellow Line and below the Red Line, pregnant women to suppress chronic energy deficiency. In general, there were three groups of activities conducted by the YNLM Team, including assistance in dealing with emergency response situations, providing children's equipment such as blankets, diapers, and milk, and nutrition kitchen activities. One aspect to note in this second stage is that the YNLM Team could not fully implement the principle of positive

deviance because, during the emergency, the food ingredients were sent from outside the villages and was probably not even available in the local market.

**Table 3.5. Accountability in the emergency response stage**

Emergency Response Stage: When the Earthquake occurred until Emergency Situation was Over		Was it as the initial plan?		Notes
Planned Program	Execution	Yes	No	
Ponia: for mothers with children on Yellow Line and below the Red Line, pregnant women to suppress chronic energy deficiency	Emergency Response Assistance	V		All programs in the emergency can be carried out according to the plan. However, the positive deviance approach, which became the foundation of the YNLM Program, was not entirely possible in an emergency. During the crisis, the food was taken from other areas.
	Equipment for Children (blankets, diapers, milk)	V		
	Nutrition Kitchen	V		

After the emergency response situation was over, the YNLM team returned to their initial plan by implementing the nutrition post program. In this third stage, in general, the YNLM team operates the program according to the plan. However, the implementation was constrained with the staff turnover, which was quite difficult for the Team. The resigning staff were then replaced by new staff, which forced the active staff to train them, while, at the same time, the program implementation had already been very time consuming and took a lot of the staff's attention.

The understaffed situation was overcome by the involvement of the members and captains of Ponia to help the Nutrition Post Program to run well. However, this triggered an unexpected problem from the members and captains who expected a reward for their work.

However, if we look at the basic principle of this Project, the main goal of the Project is to empower local community in managing the Nutrition Post. These local cadres are expected to have roles in eradicating malnutrition and stunting in the targeted villages. From the beginning, YNLM has trained paramedics of Primary Healthcare Unit (Puskesmas) in Senaru and Bayan, and then in return they trained the Posyandu cadres to assist them in stunting rehabilitation and children development. These paramedics become trainer pool and they mentoring the local cadres in managing the Nutrition Post. Unfortunately, because of the earth quake, the focus of Puskesmas has been shifting to handling the community's health post-earth quake and fixing the Puskesmas's infrastructures. As a result, the role of trainer was returned back to YNLM. Therefore, workload of the YNLM's staffs become significantly increased after the earth quake.

In addition, it should also be seen in a balanced way that the involvement of captains from local community was a transition from the provision of captains and volunteers recruited in the context of disaster response to selected cadres who become captains in the post 6 months of disaster response phase. This was done by YNLM to encourage local community to get motivated again in their activities and contribute to Ponia's service efforts.

**Table 3.6. Accountability in returning to the original program stage**

Returning to the original program stage: after conducive situation		Was it as the initial plan?		Notes
Planned Program	What is the execution?	Yes	No	
Nutrition Post	new staff reinforcement due to resigning staff	V		new staff reinforcement that went simultaneously with program implementation, causing seemingly high staff workload
	member reinforcement	V		
	Program Implementation: already started running in Karang Tunggul Village. In other villages, it was still in the dissemination stage to the village community	V		The lack of staff was then covered by the involvement of members and captain of Ponia to keep the program running

### 3.4 Program Strengths

Based on the results of the in-depth interviews, group discussions and observations, this mid-line study identifies some strengths of the program conducted by the YNLM Team in three villages. These strengths can be categorized into two groups; program strengths and human resource strengths.

In terms of the program strengths, five aspects were assessed as strengths by the stakeholders in the program location, namely:

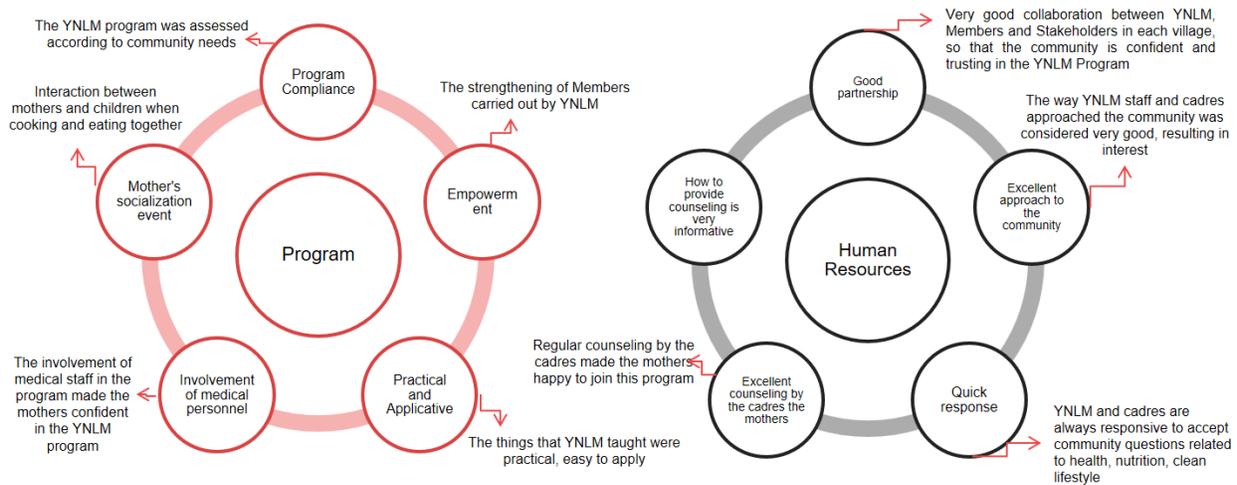
1. **Program suitability:** various activities conducted by YNLM were then evaluated according to the needs of the local community. The stakeholders recognized the nutrition problem in young children as a problem in all three villages, which required special treatment. As stated by BAPPEDA KLU (Planning and Development Agency of North Lombok), what YNLM had done was in direct contact with villagers who needed it, and this is difficult for the government bureaucracy to do.
2. **Community Empowerment:** YNLM has been considered as an organization that strengthens the local community, especially the members who were recruited directly at the program location. These members then helped the local community participate in various activities conducted by YNLM actively.

3. **Practical and applicable:** various activities held by YNLM were considered useful, and were not difficult to implement by the village community.
4. **Involvement of medical personnel:** the participation of medical staff from Pre- and Post- prenatal care and information and health center in the YNLM program made the mothers feel confident about the YNLM Program. It was also supported by the mothers interviewed, as well as those involved in the group discussions.
5. **Socializing Media:** the activities conducted by YNLM involved the mothers in the location of activities. The mothers rated these activities as a medium for them to socialize with each other.

Meanwhile, the strength of human resources include:

1. **Ability to work together:** The YNLM team has been considered capable of working very well with the members and stakeholders in each village. It caused the local community to believe and trust the YNLM Program.
2. **Approach to the Community:** The way the YNLM team and members approached the community was relatively reasonable that it could generate interest from the mothers who were the targets of the program.
3. **Quick response:** The YNLM team and the members were relatively responsive in receiving community questions related to health, child nutrition, lifestyle habits, and others.
4. **Member assistance:** The members assisted the mothers very well. This assistance, according to the mothers, was done routinely, which made them happy to participate in this program.
5. **How to counsel:** The mothers in the three villages agreed that the counseling conducted by the YNLM team was excellent because it was very informative and easy to understand.

**Figure 3.3. Strengths of the YNLM Program**



Several statements from participants in this study about the strength of the YNLM Program can be seen in the following section.



**Mother in Loloan Village**

*"Children have increased appetite when they are at the nutrition post or Ponia. They have a lot of friends, can play and the food is delicious."*



**Ponia Captain - Anyar Village**

*"The role of YNLM is very influential for the community because here is given information on how to process food that is good and right"*



**Sukadana Village Secretary**

*"The YNLM program is in line with the village program, so that the village is very supportive such as the assistance of weighing tools and height measurement tools for children." Sukadana Village Secretary*



**Sukadana Cadre**

*"Many mothers join the program because their children are ashamed of being included in the GK category. They learn how to make 4-star food that can meet children's nutrition because most mothers are lack information about child nutrition."*

**3.5 Program Weaknesses**

Apart from some strengths, the YNLM Program also has several weaknesses. Six weaknesses were identified in the interviews and discussions with the speakers, including:

1. **The limited number of staff:** informants see that, in various activities, the direct involvement of YNLM staff seems still lacking.
2. **Timing of activities:** Mothers considered the schedule of YNLM activities often crashed with the busy hours on their households, especially during the harvest season.
3. **Variety of activities:** beneficiary mothers felt that the YNLM activities were still lacking, so they felt bored with the existing activities.
4. **Pregnant mothers follow-up program:** the pregnant mothers who were parts of the program doubted the sustainability of the program after they gave birth.
5. **Post facilities:** the facilities at the Post were lacking in some aspects, such as educational games, books for pregnant women, parenting books.
6. **Control of medical personnel:** the mothers felt the lack of supervision from doctors or medical staff, so the mothers could not consult directly.

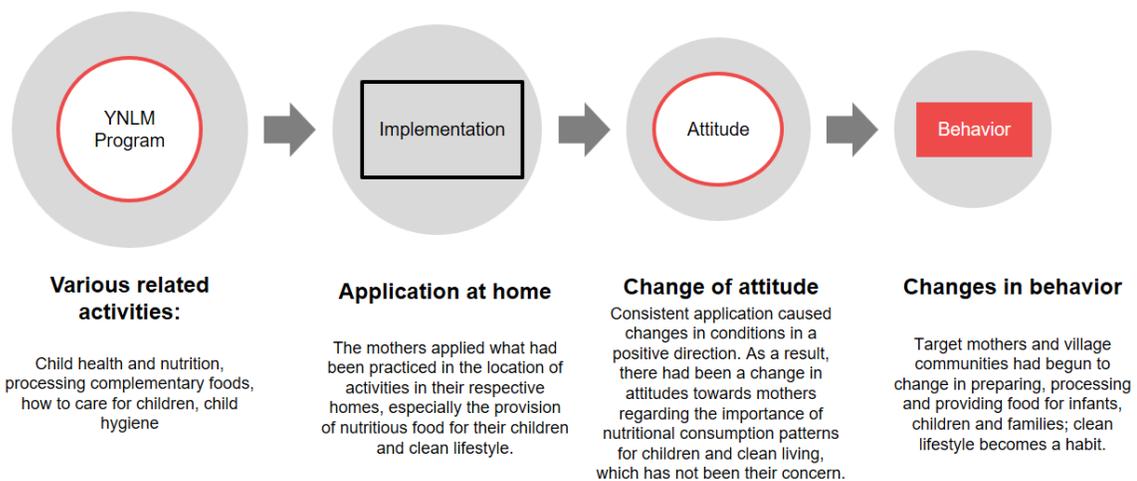
Some examples of resource persons' statements related to several weaknesses above, can be seen in the following section.

<p><b>Number of YNLM Staff</b></p> <p><i>"We have to admit that the number of human resources is still lacking. Previously there were 3 Teams, but a number of people in the Team have finished in this Project. Therefore, we are not able to divide the time, because we monitor per village, with different times. So the focus is divided"</i> <b>YNLM staff</b></p>	<p><b>Activity Varieties</b></p> <p><i>"We hope that we will also be involved when cooking, so we know what the menus are, how to cook them, and how to determine the portions"</i> <b>FGD in Loloan Village, Mothers of BGM and GK Children</b></p>	<p><b>Program Objective</b></p> <p><i>"Pregnant women also take part in this program. But after giving birth, there was no sequel. In fact, her child might need help"</i> <b>FGD Mother in Anyar Village.</b></p>
<p><b>Activity Timing</b></p> <p><i>"When the Program has run for a long time, it is hard to expect them to keep coming because of their busy work, especially at harvest time"</i> <b>Captain in Ponia</b></p>	<p><b>Post Facilities</b></p> <p><i>"I hope there are books on parenting provided at the Post. In addition, children's toys are also lacking. There are cars, but they are fought over by FGD children in Loloan Village,"</i> <b>Mother of BGM and GK Children</b></p>	<p><b>Control/Counseling</b></p> <p><i>"There must be an examination from a doctor, so we don't need to go downstairs"</i> <b>FGD Mother in Loloan Village</b></p>

### 3.6 Program Impacts

YNLM applied a **positive deviance** approach by setting an example and direct practice to the target mothers, qualitatively, there seemed to be attitude and behavior changes from the mothers in terms of nutrition provided to their children and clean lifestyle. In short, the stages of attitude and behavior changes identified in this study can be seen in Figure 3.4.

**Figure 3.4. Behaviour and attitude change stages of the target mother**



There are various activities in YNLM Program which are related to children's health and nutrition, processing complementary foods, childcare, and a clean lifestyle, all done in the form of practice or giving direct practice to the target mothers. The mothers then applied the lesson in their homes. The consistent and continuous application from the mothers led to the child's condition change in a positive direction. As a result, there had been an attitude change from the mothers towards the importance of nutrition provision patterns for children and clean living, which used to be none of their concern. This attitude change came after the target mothers saw the evidence or the results of what they had applied. Eventually, the target mothers began to change their behavior in terms of preparing, processing and giving food to their children and other family members. The clean lifestyle also started to apply in the family routine. These target mothers then transferred their attitudes and behavior to the neighbors, which slowly lead to positive behavior and attitude change.

From the interviews, group discussions, and observations, there were also behavior changes that occurred during this study. In brief, the change in behavior can be seen in Table 3.7.

**Table 3.7. Details of behavior changes in target mothers**

Target mothers	Baby and Children	Pregnant women	Village Community
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
Increased variations in the use of food ingredients	Getting used to consuming vegetables	Reduction of non-nutritious intake during pregnancy	Village Communities gain knowledge from the target mother MSG reduction in cooking
MSG reduction in cooking	Increasingly accustomed to brushing teeth regularly	Increased efforts to eat varied foods during pregnancy	Improvement of drinking water cooking practices
Increasing the use of the yard as a food source	Increasingly accustomed to washing hands before eating		Increased variations in food intake for infants and children
			Increasing the use of the yard to plant food source
<p><i>"No money is no longer a reason not to provide healthy food for my child. Now I give my children vegetables, komak, tofu, tempeh, moringa, corn, katuk leaves, fish. Much more varied"</i> Mother FGD in Loloan Village</p>		<p><i>"After participating in Ponia, I no longer cook using a machine. I replace it with sugar and salt"</i> IDI mother of GK child in Sukadana Village</p>	

In the target mothers, there was a change in the increase in variations in the use of food ingredients, especially from the local market, reducing the use of MSG, and increasing the use of garden plants as a source of nutrition. On the other hand, there are some identified changes in babies and children, such as getting used to eating vegetables and brushing their teeth regularly and washing their hands before eating.

*"Not having money is no longer a reason not to provide healthy food for my child. Now I give my children vegetables, komak, tofu, tempeh, moringa, corn, katuk leave, and fish. Much more varied."* FGD mother in Loloan village

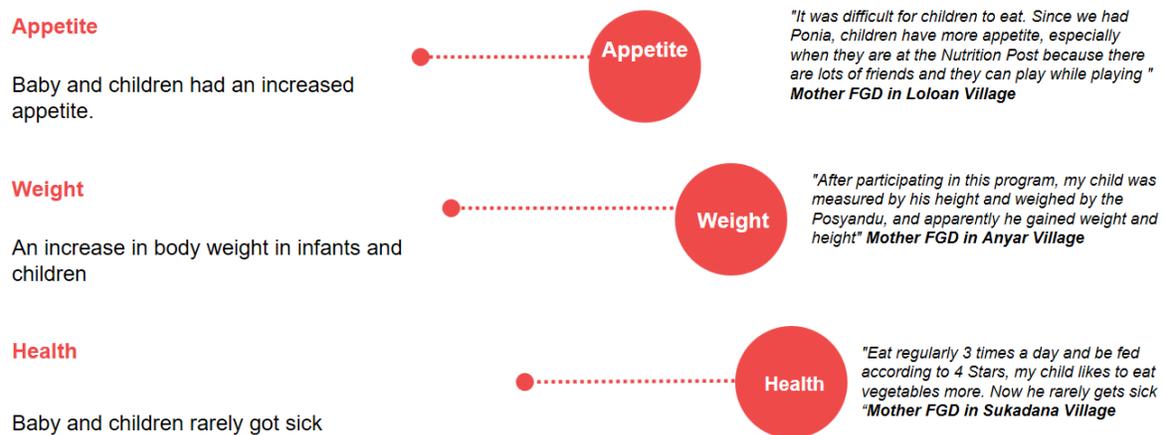
*"After participating in Ponia, I no longer use MSG and replace it with sugar and salt"* IDI Mother of Children below the Yellow Line in Sukadana Village

There are also two identified behavioral changes in pregnant women as they started to reduce their non-nutritious intake during pregnancy and increase their effort to eat varied

foods. Furthermore, there was also attitude change in the community around target mothers, especially in terms of reducing MSG in cooking, and drinking more water, increasing variations of food for baby and children, and increasing the use of their yards to plant food source. Some statements related to these aspects can be seen in the following section.

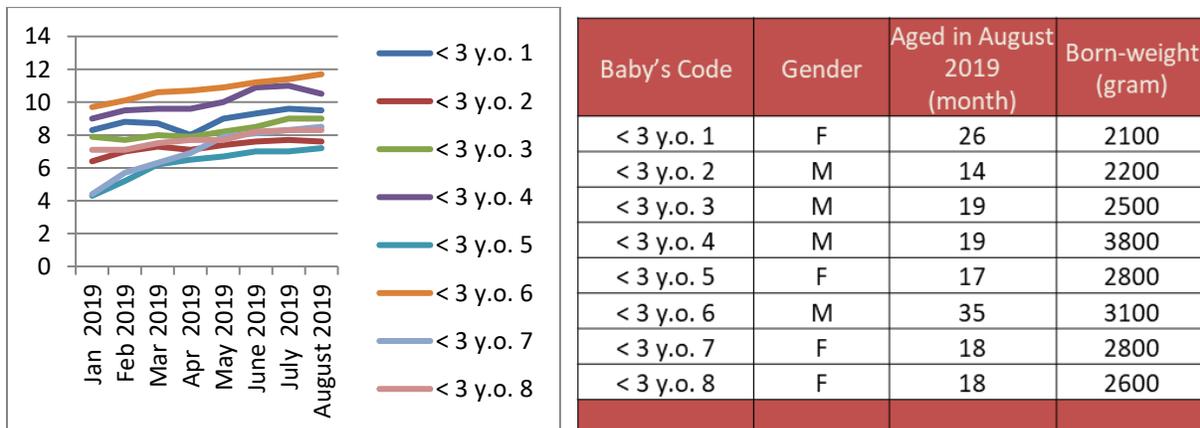
Positive results of behavior changes on children can be recognized as well. Based on the qualitative data, the positive results in babies and children can be seen in Figure 3.5.

**Figure 3.5. Positive results in children**



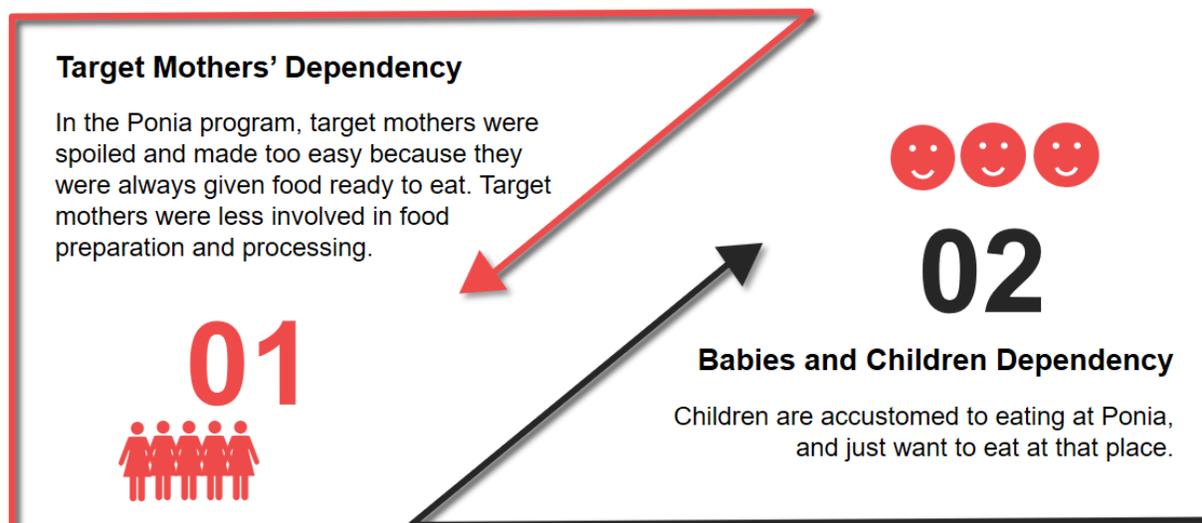
In addition, quantitatively, the data of the babies and children's weight and length were recorded during the interview and indicated positive developments, as shown in Figure 3.6.

**Figure 3.6. Positive results in children related to body weight and length**



Although target mothers and children had recognized some positive impacts, it is important to highlight the negative effects that emerged, as shown in Figure 3.7. The dependence of the target mothers and their children on the Ponia Program during emergency response situations needs to be anticipated by YNLM when running the Nutrition Post Program after the earthquake.

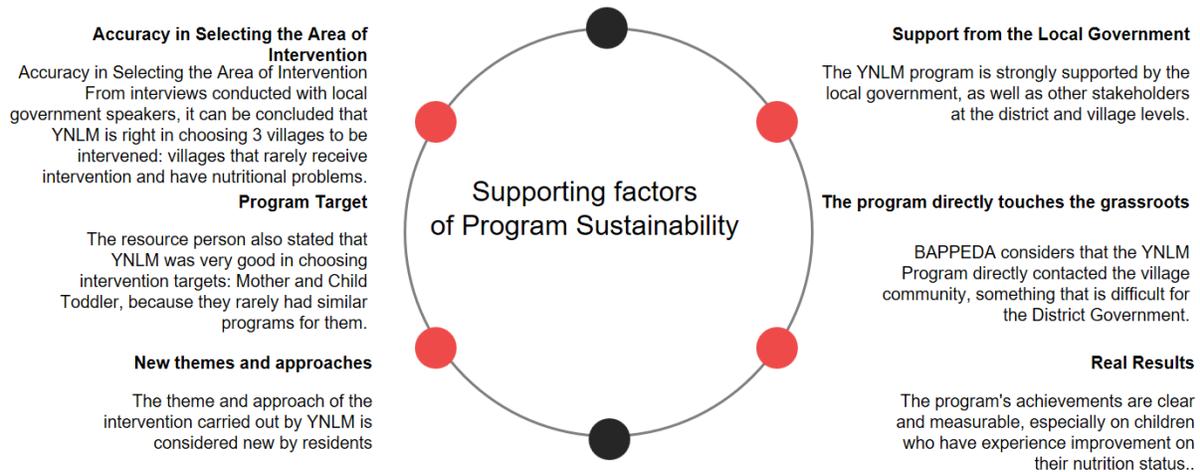
**Figure 3.7. Negative impact of the Program**



### 3.7 Program Sustainability

From this mid-line study, some supporting factors of the program sustainability can be seen in Figure 3.8.

**Figure 3.8. Supporting factors in Program Sustainability**

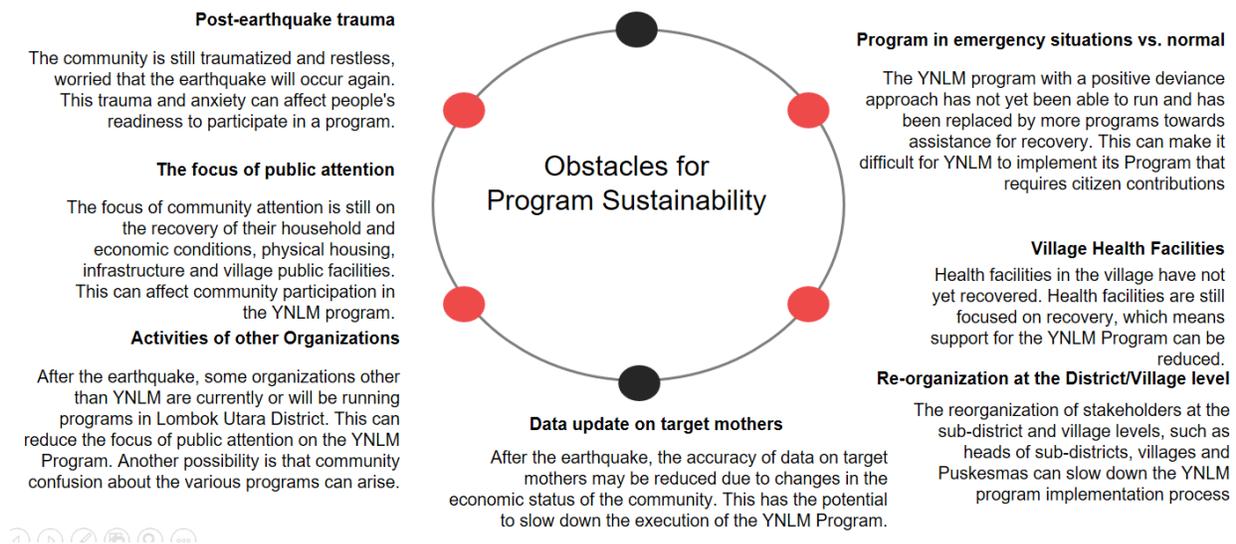


From Figure 3.8 we can see six supporting factors that provide considerable opportunities for the sustainability of the YNLM Program. First, the accuracy of YNLM in selecting intervention areas was assessed by the stakeholders as the asset for the program sustainability. The three villages chosen were the villages that rarely received intervention despite having nutritional problems in babies and children. The second reason is related to program targets. The speakers also stated that YNLM had appropriately chosen its intervention targets, i.e., mothers and children, because there were not many programs targeting this segment. Third, the theme and approach used by YNLM attracted the residents who considered them unusual.

The YNLM program was also strongly supported by the local Government and other stakeholders at the District and Village levels. Furthermore, the YNLM Program is known as a program that directly touches the lower classes. The BAPPEDA considers YNLM Program to be directly in contact with the village community, which was difficult for the District Government to conduct. The last supporting factor is the existence of tangible results that were felt and seen by the target mothers and local communities. This program's achievements are real and measurable, especially on children who experienced improvement in their nutrition status.

Although there were some supporting factors in program sustainability, YNLM still needs to pay attention to obstacles in Program sustainability. This obstacle of the program sustainability can be seen in Figure 3.9.

**Figure 3.9. Obstacles in Program Sustainability**



Post-earthquake trauma on the community existed during interviews and group discussions. Many speakers were still worried about the earthquake that could happen anytime. The shock and anxiety could affect the readiness of the community to participate in a program. After the earthquake, the focus of the community's attention was still on the recovery of their household and economic conditions, physical housing, infrastructure, and village public facilities. Thus, it could also affect their participation and the ability to the YNLM Program.

It was inevitable that, After the earthquake, many organizations other than YNLM ran programs in North Lombok District. This situation could also reduce the focus of public attention on the YNLM Program. Another possibility was that the community got confused about the various programs. It would be difficult for residents to differentiate one program from another, and it was difficult for YNLM to prevent the target mothers from getting intervention from other programs.

The next limiting factor was the difference in principles in implementing Ponia vs Nutrition Post. The YNLM program with the positive deviance approach (Nutrition Post) had not yet been able to run and replaced with programs directed towards assistance during the

emergency response period (Ponia). It was difficult for YNLM to implement its Nutrition Post program that required the contribution of target mothers.

Furthermore, the earthquake that destroyed some health infrastructure at the sub-district and village levels caused health facilities and human resources need recovery. It would probably also reduce the health support of the YNLM Nutrition Post Program. In addition, the re-organization of stakeholders at the sub-district and village levels, such as the heads of sub-districts, villages, as well as the village secretaries, or the heads of the health center could slow down the YNLM program implementation process. YNLM needed to build relations with the replacing officials. The last aspect that also needs to be anticipated by YNLM is the accuracy of the target mother data, which might decrease due to changes in the economic status of the community after the earthquake. This situation had the potential to slow down the execution of the YNLM Program.

In order to continue YNLM Program's opportunities, some pre-conditions need to be considered, such as:

- 1. More varied innovation activities:** innovation is necessary in terms of a variety of activities, such as nutritional counseling, advanced programs for pregnant women, counseling related to early marriage vs. nutrition, programs for youth/youth related to nutrition, and others
- 2. Attention to the quantity and quality of human resources:** The attention to the turnover of the HR handling the program so that they do not change the PIC often. The certainty related to the number of HR needed vs. the workload and responsibility, as well as the capacity of the PIC.
- 3. The reward for the cadres:** Reward for cadres/captains who have a significant role in implementing activities is necessary to appreciate their performance.
- 4. Increasing cadre capacity:** this study also concludes that the c need to increase their capacity, so that they will have more in-depth knowledge about nutrition.
- 5. Foundation Control and Supervision in the Field:** more intensive control and supervision from YNLM staff are required.

6. **Coordination between YNLM Managers and Local Staff:** The coordination between Project Managers at the center, and YNLM staff who are at the project site need to increase.
7. **Increased collaboration with the Health Center and Posyandu:** YNLM and health centers/posyandu need make their collaboration more intensive so that activities can be linked, and the target mothers can implement the counseling materials given by medical personnel.
8. **The achievement dissemination:** YNLM needs to spread its achievements so far, especially about its success in improving the nutritional status of some children in three villages to motivate other mothers to participate in activities organized by YNLM actively.
9. **Replication in other Villages:** YNLM already plans on how to replicate the process in different villages, which will be funded by the village government. This replication needs to be conducted before the projects in the three villages were done.

What about YNLM Staff's readiness to continue the post-earthquake program? From the interviews conducted with YNLM Staff at the location, they are optimistic that the program can be maintained and achieve its targeted goals, as long as the problems in the quantity and quality of HR can be resolved immediately. Some points that can be concluded from the interview are:

1. **Earthquake was not an obstacle:** the earthquake had no impact on the project's achievement goals, and the quality of the human resources can be maintained. The original timeline could still be achieved by making use the human resources.
2. **The earthquake did not change the initial plan:** the earthquake did not change the program initial plan. There was a shift in the timeline and sequence of the program. The recovery process was quite time-consuming. The community was not yet ready to accept the plan because many people were still in trauma.
3. **Community positive response to the Program as the main asset:** almost all staff were optimistic that the program could still be conducted according to the plan, due to

high public enthusiasm related to the program. It was considered as a significant asset for YNLM to successfully implement the program.

*"The success of the program also depends on the staff because before the earthquake, the program does not have any problems, other than the number of staff that is not yet optimal, everything is fine*  
**"YNLM Staff.**

*"As a result of the earthquake, we were lagging behind the original timeline. Moreover, we have a few human resources. It takes much time to recruit and train new workers. On the other hand, we also still have to run to continue the program with many homework.* **"YNLM staff**

*"We feel the program is appropriate and can run well for the community at this time. It's just that now we lack of staff/HR. So you want to walk fast, you can't and must adjust. Even though the enthusiasm of the community is high* **"YNLM staff**



## Chapter 4 Conclusion

# Chapter 4 CONCLUSION

From the results of the mid-line study conducted, several conclusions can be drawn, as follows:

1. Program adjustments made due to the earthquake can be implemented well by YNLM.
2. The Ponia program during the emergency response period is quite successful in changing the behavior of the target mother in providing nutrition to her child. Behavior changes can also be seen in the children, especially in their variety of food consumed, and a clean lifestyle.
3. Changes in maternal and child behavior have a positive impact on the weight of some children participating in this program. Further quantitative studies are required to obtain the number of positively affected children.
4. In terms of accountability, the JAAM Project has been implemented according to the plan, even when there are program adjustments when the earthquake hit the area. The project faces severe challenges in terms of staff turnover that directly handles the field implementation.
5. The project strengths can be categorized into two aspects: program strengths and human resource strengths. In terms of the program strengths, five sub-strengths can be identified, such as: program compatibility with the real needs of the community, empowerment of the local community, the involvement of medical personnel, applicativeness and practicality, and the creation of media for mothers to socialize.
6. In terms of HR strengths, it can be concluded that the YNLM staff, cadres/captains have succeeded in building a very good relationship with the local stakeholders, so the program acceptability level is relatively high.
7. On the other hand, this project still has some weaknesses, which in general can be grouped into six categories: number of human resources, the timing of activities, variety of activities, program sustainability for pregnant women, program facilities, and quality control/assistance.
8. The mid-line study also concluded that the JAAM Project is very likely to continue, because there are some supporting factors, especially related to program relevance,

high stakeholder acceptability, and the tangible results achieved so far. On the other hand, YNLM needs to overcome the challenges of community conditions in the aftermath of the earthquake, which can hamper the smooth implementation of the Program.

9. However, there are still some pre-conditions that need to be made for program sustainability and to achieve maximum results. These pre-conditions include nine aspects: innovation activities to be more varied, attention to human resources, a reward for members, increasing members capacity, control and field supervision, coordination of YNLM Management and Staff, links with Puskesmas/Posyandu, program socialization and achievements so far, and program replication to other villages.



## Chapter 5

### Recommendation

# Chapter 5. RECOMMENDATION

Based on the results of this mid-line studies, there are some recommendations for YNLM as follows:

1. YNLM is suggested to follow up on the matters regarding program sustainability requirements, which include nine aspects so that the Program can continue and achieve maximum results. These nine aspects include the innovation of activities which can be more varied, attention to human resources, reward for members, member capacity building, control and field supervision, YNLM Management and Staff coordination, strengthening links with Puskesmas/Posyandu, program socialization and achievements so far, and replication the program to other villages.
2. For the short term, it is suggested to prioritize attention to some human resources implementing the program, since the YNLM staff in the site must keep their pace with time, as their numbers are limited.
3. Considering that YNLM is currently starting the process of socialization in other villages outside the three villages mentioned in this study, so far, the socialization of the concrete achievements of the Program needs to be delivered to motivate the target mothers to participate in the Hearth program.
4. 4. Regarding the proposal to enter another village as an effort to replicate the YNLM Program, analysis based on secondary data shows that there are 4 villages that are recommended to be entered, namely: Mumbul Sari, Karang Bajo, Senaru, and Roots. The reasons for proposing the four villages are as follows:

- a. Mumbul Sari and Karang Bajo Villages: one of the three villages in Bayan Subdistrict that are included in the villages that have become the priority in handling poverty and stunting (TNP2K, Ministry of PPN/BAPPENAS, 2017)
- b. Senaru and Akar-Akar Villages: are the villages with a number of stunting children exceeding the average of North Lombok Regency (BAPPEDA North Lombok Regency, 2019)

At the implementation level, a number of improvements are proposed so that the YNLM Program in Bayan District can run better. Regarding the substance of the Program, the following are suggested for YNLM:

- 1. Increased Awareness:** awareness of the village community towards the YNLM Program still needs to be increased, because not all of them know about this Program. In addition, the socialization of achievements so far also needs to be done so that people are motivated to participate.
- 2. Variety of Activities:** the range of activities still needs to be improved. More counseling about the impact of malnutrition, and the need for expert speakers in the counseling, not only YNLM members and staff.
- 3. Targets and Involvement:** Targets need to be broadened, not only Mothers with children on Yellow Line and below the Red Line, but also Mothers who have problems with the child's diet. In addition, the role of the target mother needs to be increased in food preparation. In the Hearth Program, this can be overcome.
- 4. Timing and Coordination:** setting the schedule of activities by coordinating with related parties in the Village is essential. Community participation is expected to increase since the probability of crashing schedule with other activities can be minimized.
- 5. Routine Counseling Services:** nutritional counseling services, infant and child health, and pregnant women are regularly supervised with counseling provided directly by medical personnel, not just Pre- and post prenatal care and information staff. This service needs to be provided in remote villages like Loloan. YNLM needs to encourage Puskesmas to do this.
- 6. Facilities at the Hearth center:** Add facilities at the Hearth such as educational games and reading materials that are simple and detailed so that mothers can easily understand them regarding nutrition and childcare.

Furthermore, regarding human resources, the following are suggested at YNLM:

1. The number of HR managing and implementing the Program needs to be increased so that activities can take place optimally and provide maximum results
2. The capacity of HR, especially members, needs to be improved so that they can provide more in-depth and varied information to the target mothers.

3. YNLM needs to consider giving rewards to the Members/Volunteers as an appreciation for their efforts and performance.



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