

**Final report template – Polish Aid Grant**

Project name: **Establishing a Community-owned Food Garden: A Stunting Prevention Initiative**

Project number: n/a

Name of the institution: **Yayasan Kopernik**

Name of the partner institution / contractor: **Lembaga Timor Moringa Indonesia**

Project implementation period: **July - December 2021**

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*Description of the project implementation*

**Information on the achieved goals of the project:**

Timor Tengah Selatan (TTS) or South Central Timor in East Nusa Tenggara province is one of the regions in Indonesia with the highest stunting prevalence of children under two years old, with 34.6% of children reported as stunted (TP2AK, 2018). Based on our research, three villages in Soe City have extremely high stunting prevalence of children under five years old: Kuatae (82.6%), Noemeto (76.9%), and Taubveno (72.6%). Despite a number of efforts to address this problem, the stunting prevalence remains high.

To better understand the challenges facing the community in these three villages, the project team conducted an Unmet Needs assessment at the early phase of the project to identify the gaps between the current conditions and the desired conditions to reduce stunting. Using the findings of our Unmet Needs assessment, we designed [three main interventions](#) to be tested and implemented in the project locations.

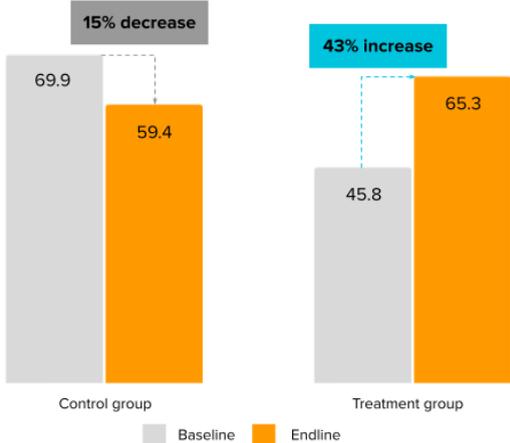
Below are the key findings of the project interventions, with each intervention being implemented in the treatment group in Kuatae village and being compared to the control group in Noemeto village:

*1. Knowledge of stunting*

Knowledge of stunting was measured to understand the ability of the project participants (cadres, pregnant mothers, and mothers with children under 2 years old) to explain the definition of stunting, its impact on child growth and development, and preventive measures that can be taken.

These three indicators were evaluated individually and the scores were averaged for the treatment group, then compared with the control group.

Improvement in Mother’s Stunting Prevention Knowledge



**The results:** In the treatment group, participants’ knowledge of stunting and its prevention increased by 43%, whereas at the endline, knowledge of stunting prevention in the control group had decreased by 15% from the baseline.

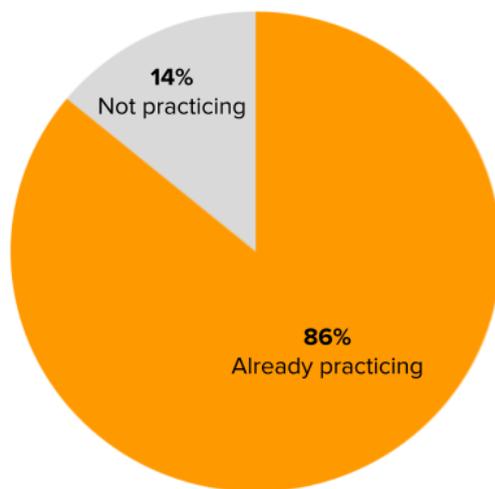
This result shows that the activities were effective to improve knowledge on stunting prevention.

### 2. *Practicing lessons obtained from the training sessions*

The application of learnings from lessons that we measured were stunting prevention, the use and consumption of Moringa, and the use of other food ingredients with high nutritional value for cooking family meals. Data was collected from pregnant mothers and mothers with children under 2 years old during the endline survey.

#### **Implementing Lessons from All Provided Trainings**

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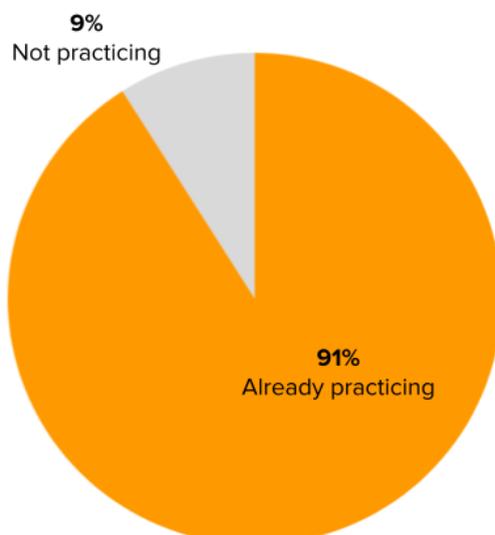


**The results:** At the endline survey, 86% of mothers had applied learnings from lessons from the training sessions, indicating that the knowledge and skills they gained from the training sessions were relevant and applicable.

### 3. *Local food consumption* This indicator was used to determine whether pregnant mothers and mothers with children under 2 years old had implemented learnings from the local food and moringa cooking competition in their respective homes. Data was collected during the endline survey.

#### **Proportion of Mothers Implementing Lessons Learned During Cooking Competition**

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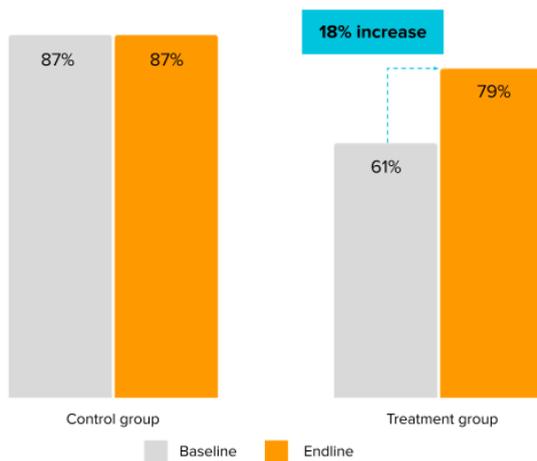


**The results:** At the endline, 91% of mothers had cooked and consumed local nutritious food at home at least once per week.

#### 4. Moringa consumption

The first indicator of moringa consumption was measured by the percentage of pregnant mothers and mothers with children under 2 years old in the treatment group who reported an increase in moringa consumption, and was then compared to the control group.

Increase in Moringa Consumption

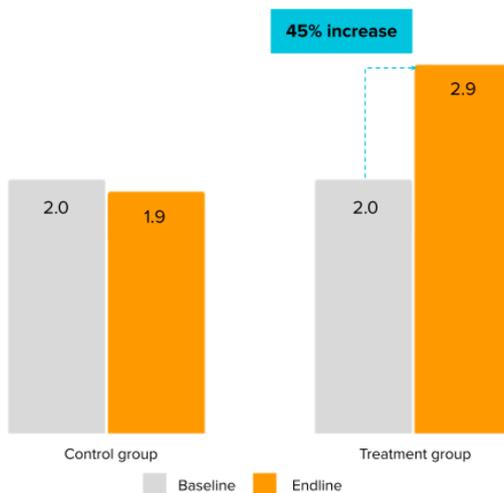


**The results:** At the baseline, the number of participating mothers in the treatment group who reported consuming moringa frequently was 61%, this was 26% lower compared to those in the control group where moringa consumption was already high (87%).

At the endline, we found that there was an 18% increase of pregnant mothers and mothers with children under 2 years old who consumed moringa frequently, while there was no change in consumption observed in the control group.

The second indicator of moringa consumption was calculated to identify the average frequency of moringa consumption by mothers and family members per week.

Frequency of Moringa Consumption (per week)



**The results:** At the baseline, the consumption of moringa for both groups was the same (2 times per week). At the endline, while there was no significant change in the control group, there was a 45% increase in the average moringa consumption frequency per week in the treatment group.

These findings show that education sessions on moringa and its benefits are effective in increasing moringa consumption in the treatment group.

## Information on the implemented activities:

- *Unmet Needs Assessment*

Kopernik conducted an Unmet Needs assessment to:

1. Map out the current condition of factors associated with stunting.
2. Identify the current and previous initiatives with the aim to prevent stunting through moringa consumption.
3. Identify the barriers or challenges faced by relevant stakeholders and the opportunity to strengthen stunting prevention initiatives.

- *Intervention 1: Building Community Knowledge on Stunting Prevention*

1. Kopernik provided training sessions to cadres, pregnant mothers, and mothers with children under 2 years old about stunting and its prevention, using and distributing the 1,000 days height charts and flip charts as simple and user-friendly tools to monitor children's height at home.
2. Kopernik also conducted biweekly counseling sessions for pregnant mothers and mothers with children under 2 years old in order to increase mothers' knowledge and practices around stunting prevention.

- *Intervention 2: Nutrition-sensitive Agriculture Education*

Kopernik focused on encouraging pregnant mothers and mothers with children under 2 years old to improve the quality of food and nutrition intake by their children, by implementing two main activities:

1. Moringa-related activities

Kopernik conducted two moringa education sessions. The first session was focusing on the benefits and nutritional facts about moringa to combat malnutrition, as well as a workshop on how to process moringa into edible products. The second session focused on agricultural practices of growing moringa. Together with Timor Moringa, our local partner, Kopernik distributed 200 moringa seedlings to 30 pregnant mothers and mothers with children under 2 years old.

2. Local food-related activities

- a. Local food identification. We conducted a participatory workshop to identify and map the locally available nutritious food in the village.
- b. Recipe development. We worked with the project participants to develop new recipes using the locally available nutritious food.
- c. Local food cooking competition. We conducted the first ever local food cooking competition in the village.

- *Intervention 3: Establishing a Community Garden*

With the support of the head of Kuatae village and a farmers group, we established a community garden in Kuatae village, with the aim to provide the community members with access to sustainable and nutritious local food. The project

participants planted a variety of vegetables in the garden, including 300 moringa seedlings.

#### **Changes made to the project during its implementation:**

- **Project location.** Kopernik previously proposed to implement the project in two villages in Central Sumba, Ole Ate and Wee Luri. Due to unavailability of our previous project partner in Sumba to work with us on the project within the proposed time frame, the project location was changed to TTS regency, an area in East Nusa Tenggara with the third highest prevalence of stunting in the province, focusing in three villages with high prevalence of stunting: Kuatae (82.6%), Noemeto (76.9%), and Taubнено (72.6%).
- **Unmet Needs assessment.** To better understand the challenges facing the community in these three villages, the project team conducted an Unmet Needs assessment prior to the implementation of the project. This assessment aimed to map out the current condition of factors associated with stunting and to better understand the needs of the community which are associated with stunting prevention efforts. The assessment was completed within two weeks, gathering information through interviews with key stakeholders in the three villages – including heads of village, community leaders, and cadres of village’s Integrated Healthcare Center (Posyandu), as well as representatives of TTS Health Office. The findings from this assessment were then used to design three main interventions to be tested and implemented in the project locations.
- **Water filter distribution to project partners.** One of the findings from our unmet needs assessment was limited access to safe drinking water. According to the UNICEF Nutrition Framework (2015), access to safe drinking water is one of the direct drivers of malnutrition. To provide access to clean drinking water, we distributed eight water filters to project partners and stakeholders that would allow them to provide clean drinking water to their communities.

#### **Information on the beneficiaries of the project:**

The total number of beneficiaries were **55 people**. The primary beneficiaries of this project were pregnant mothers and mothers with children under 2 years old. The secondary beneficiaries were cadres and a farmers group.

1. Pregnant mothers and mothers with children under 2 years old.

	<b>Pregnant Mothers</b>	<b>Mothers with children under 2 years old</b>
<i>Number of people</i>	7	23
<i>Percentage</i>	23%	77%

<i>Age range</i>	Min:	16
	Max:	68
	Median:	29
<i>Education background (%)</i>	No education:	3%
	Elementary school:	30%
	Middle school:	17%
	High school:	47%
	Bachelor:	3%
<i>Occupation (%)</i>	Housewives:	97%
	Farmers:	3%

2. Posyandu Cadres. Kopernik provided training to 10 cadres about stunting and its prevention. The cadres represented two Posyandus in Kuatae village.
3. Farmers group. In establishing the community garden, Kopernik engaged the Melati Farmer Group, one of the farmer groups in the village, which consists of 15 people. Kopernik also trained the group members with practical knowledge about moringa agriculture.

**Information on possible difficulties in the implementation of the project:**

- Travel restrictions due to COVID-19. Kopernik's team initially planned to travel to the project locations in late July and early September to conduct the Unmet Needs assessment and baseline survey respectively. Unfortunately, due to travel restrictions, Kopernik had to cancel both travel plans and relied on our local partner to conduct both activities. During that time, we conducted all meetings virtually and coordinated all activities remotely.
- Weather conditions resulted in the community garden establishment to be delayed by one week. To meet the project deadline and have sufficient time to collect endline data, the project partner and participants had to accelerate the garden establishment by bringing in some additional farmers from Kuatae village.
- Limited participation of pregnant mothers and mothers with children under 2 years old in some training sessions. Despite being reminded of the upcoming training sessions in advance, some training sessions were only attended by half of the participants due to family commitments.

*Promotion of the project:*

Photographic material:

*Please attach five photos of the project implementation to the report. In order for them to be used in printed publications of the Ministry of Foreign Affairs, they should have a resolution of not less than 300 dpi, with a dimension of 300 mm wide. The size of a single file should not exceed 25 MB.*

### **1. Community Garden Launching**



*Taken by: Satyasmusmaya Narpaduhita (Kopernik) on 10 November 2021*

*The photo can be accessed through [this link](#).*

On 10 November 2021, we launched the Community Garden in Kuatae village. The launch event was attended by 10 project participants, 15 people from Melati Farmer Group, and the Head of Kuatae Village.

### **2. Local Food Cooking Competition**



*Taken by: Satyasmusmaya Narpaduhita (Kopernik) on 10 November 2021*

*The photo can be accessed through [this link](#).*

After the Community Garden launch, we conducted the first-ever local food cooking competition in Kuatae village. There were 5 groups participating in this competition, and each group cooked a menu featuring their local food, using the recipes they previously developed. The event went very well with all participants being very excited and proud of their cooking and creations. The food shown in the photo was selected as the winner,

consisting of mixed corn and rice, a bowl of moringa mixed with corn soup, and spinach chips.

### 3. Moringa Seedlings



*Taken by: Gidion Moses Neolaka (Timor Moringa) on 17 December 2021*

*The photo can be accessed through [this link](#).*

Mama Ona (right) with Meybi Agnesya (Timor Moringa Founder) holding new moringa seedlings to be planted in her garden.

### 4. Harvesting



*Taken by: Gidion Moses Neolaka (Timor Moringa) on 17 December 2021*

*The photo can be accessed through [this link](#).*

Timor Moringa and some of the project participants harvested bok choy from the Community Garden. This was the second harvest from this garden. All vegetables harvested were distributed for free.

## 5. Dissemination Event



*Taken by: Ketut Suastika (Kopernik) on 9 December 2021*

*The photo can be accessed through [this link](#).*

Kopernik organized a dissemination event in Kuatae village on 9 December 2021. The event focused on sharing about the project activities, findings and achievements, and was attended by 60 people – all project participants and partners, as well as key stakeholders such as the head of Kuatae village, the head of Soe City, the Heads of TTS Health Office and Agriculture Office, and a representative of TTS Mayor Office.

*In the next field, please provide the following information about each of the photos you upload:*

- *Name and surname of the photographer, or the name of the organization for which he works.*
- *Date and place where the photo was taken.*
- *Brief information about who and what the picture shows (people, situation).*

Results of the project (for promotional purposes):

*Please describe only actually conducted actions and achieved results. The description should take around 4 short paras (1000-1500 characters) including: Summary of results of the activities and their results (max 500 characters); Indication of the actual time of the implementation of the project; Description on how the project has led or may lead to a sustained change for the beneficiaries and how the project can continue to bear fruits after it has been concluded.*

Kopernik conducted three main interventions: Building Community Knowledge on Stunting Prevention, Nutrition-sensitive Agriculture Education, and Establishing a Community Garden. The activities were implemented during a five-month period, from July to December 2021.

The main achievements of the project include:

1. Increase of knowledge among mothers of young children about stunting and its prevention by 43%.

2. 86% of mothers of young children applied the knowledge they gained during the training about stunting prevention in their daily lives.
3. 91% of mothers of young children implemented the knowledge they gained about the benefits of consuming nutritious local food.
4. 43% of mothers of young children reported an increase in moringa consumption. The average frequency of consumption increased from 2 to 3 times per week.

We also identified two sustained changes:

1. Our local partner, Timor Moringa specializes in empowering local farmers through moringa agricultural practices. They are currently in discussion with the Head of Kuatae village to develop a moringa farm in the village. The farm will be fully managed by the village and the farm yields will be purchased by Timor Moringa to be processed into various nutritious products. Timor Moringa is ready to provide education on moringa agricultural practices and they have already made an agreement with the village to buy the moringa from the farm to ensure the sustainability of the moringa farm.
2. The mothers and cadres were inspired by the moringa processing workshops and the cadres have put the workshop results into practice in their Posyandu program. They have been making Moringa cakes to be provided to children during Posyandu activities to provide additional nutritional food. This practice will be continued by the Posyandu.

#### *Additional materials from the project*

*(Please attach any additional materials – documents, publications, films, recordings etc. Two attachments possible, each of max. 25 MB (each of them could be a collection of files packed by Zip or RAR). If more attachments are available, please upload them to an external disc and provide a link.*

1. Report of the Unmet Needs assessment can be accessed through [this link](#).
2. All project documentation can be accessed through [this link](#).