



IMPROVING ACCESS TO CLEAN DRINKING WATER: A STUNTING PREVENTION INITIATIVE

IMPLEMENTATION REPORT

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CHALLENGE

Stunting, low height for age, is one of the most significant impediments to brain development in the first 1000 days of life. A result of poor nutrition intake and poor health, stunting has long-term effects on individuals, including reduced physical and cognitive development, diminished productivity, and increased poor health and risk of degenerative diseases (World Bank, 2018).

East Nusa Tenggara is reported to have the third highest prevalence of stunting in Indonesia, with more than a third of children under 2 years old reported to be stunted. In Central Sumba, stunting prevalence has reached a staggering rate of 63,6% (MoH, 2018).


Much like the rest of the East Nusa Tenggara area, Central Sumba is one of the driest areas in Indonesia which faces scarcity in food and water supply, especially during the dry season. Daha Elu Village in Sumba has limited access to clean water and knowledge about stunting prevention. Currently, boiled water is stored in an open container which risks contamination from dirt and germs.

APPROACH


According to the UNICEF Nutrition Framework, access to safe drinking water is one of the direct drivers of malnutrition ([UNICEF, 2015](#)). Safe drinking water prevents diarrhoeal and parasitic diseases, which can reduce undernutrition and stunting in children. To provide access to clean drinking water, we distributed water filters to 36 households with pregnant mothers and children under 2 years old in Daha Elu Village. Before the distribution, the households were required to participate in a workshop about clean drinking water and in-house training about stunting.




CADER TRAINING - Kopernik conducted training sessions to Cadets about what stunting is, when it occurs, and how to prevent stunting using an interactive flipchart. The Cadets were also trained about how to use the 1,000 Days height chart, as well as how to properly measure children's height to monitor their development from 6 months until 2 years old.

 [Stunting Flipchart](#)

IN-HOUSE TRAINING - Through home visit training, the Cadets explained stunting to families by using a flip chart. The goal was to encourage and empower Cadet to understand better about stunting so that they could transfer the knowledge to other families in the village. Following the explanation about stunting, the height chart was distributed and put on the wall of each house visited.

 [1000 Days Height Chart](#)

WORKSHOP - We demonstrated safe drinking water practices, which was adopted from one of the triggering steps in the Community Led Total Sanitation (CLTS) approach. The goals were that the community understand why they should store the water in a safe and clean place and process the water before drinking.

 [Framework and Mechanism](#)

WATER FILTER DISTRIBUTION - After the workshop, we distributed 36 water filters to households with pregnant women and children under 2 years old as well as 10 water filters to the cadets. We explained the importance of clean drinking water, what kind of water can be filtered and how to use the water filters step by step including the functionality, the installation procedure, and the maintenance of the water filters. Then, the Cadets assisted in the installation of the water filters.

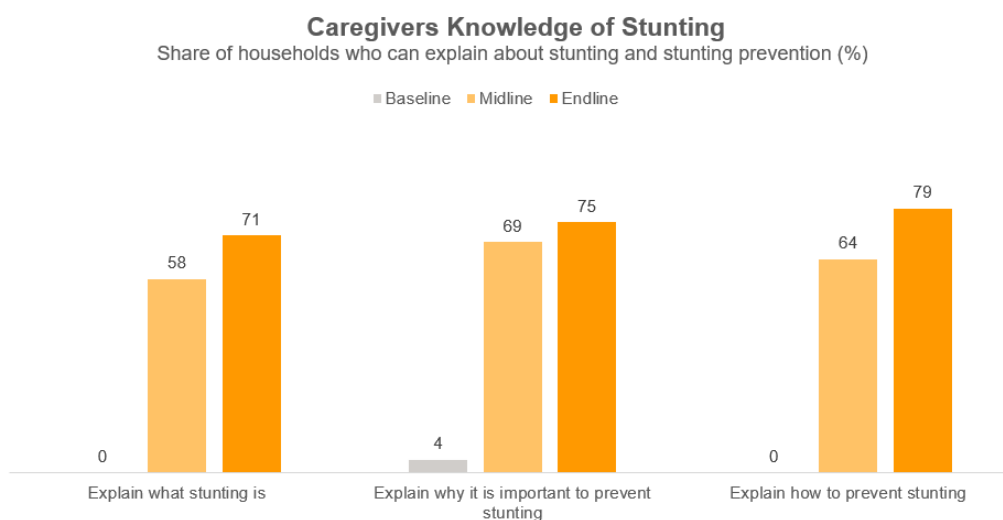
Activities Flow



IMPACT

HOUSEHOLD KNOWLEDGE ABOUT STUNTING AND STUNTING PREVENTION

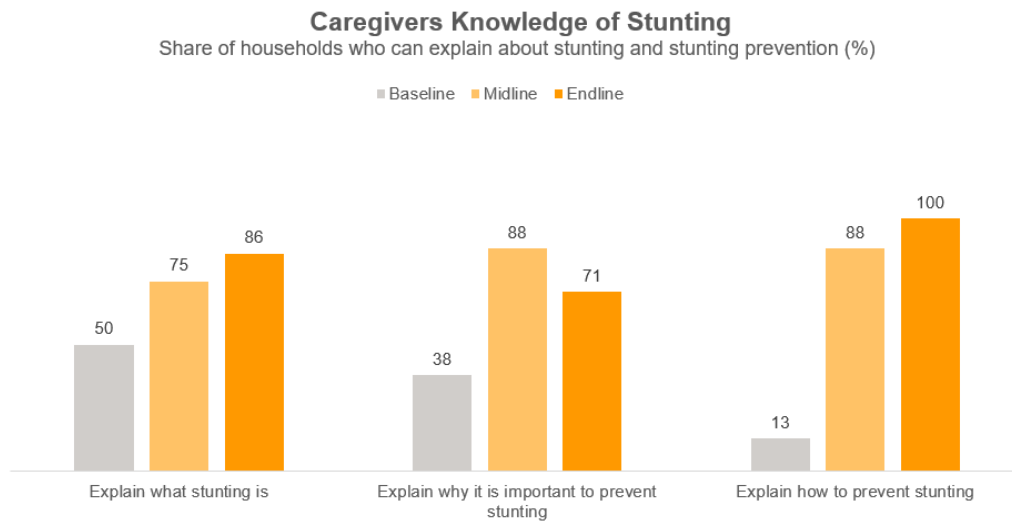
In our baseline survey, only 2 out of 36 (5.5 percent) mothers had heard about stunting but could not explain what it was. At the end-line survey, this number had grown to 71 percent. This result showed a significant improvement in households' knowledge about what stunting is. Furthermore, half of the surveyed households were able to explain clearly why it is important to prevent stunting. Nevertheless, families who struggled to explain about stunting were able to choose the right answer on the impact of stunting on the flipchart. From this experience, we learned about the importance of a simple tool for communities to visualize and understand a complicated issue, including the monitoring tools.



CADER CAPACITY IN DELIVERING THE KNOWLEDGE ABOUT STUNTING PREVENTION

Caders or village field officers are on the front lines of stunting prevention. Having a well-informed and competent cader is crucial in improving the quality of health services at the village level. At least once a month, caders together with midwives provide services at Posyandu (a rural health facility) to monitor the health status of pregnant women and children under 5 years old.

Compared to our first visit to the village, the end-line survey indicated an increase of knowledge on stunting, with 86 percent of cader being able to explain what stunting is, and 71 percent could explain about the health and cognitive development impacts of stunting. The caders could also confidently explain about the stunting impact on brain development using different sizes of the brain relative to cognitive development and study performance.



SAFE DRINKING WATER PRACTICES

In Daha Elu Village, all households use spring water and rainwater as their main source of drinking water. Approximately 80 percent of households boil the water, while 20 percent consume uncooked water. Prior to the intervention, despite having boiled water, 83 percent of the households still reported to have digestive problems. This number had decreased significantly to 9 percent after using the water filters. In terms of treatment, all households expressed the ease of using the water filter technology. They cleaned the water filters weekly or biweekly and were able to demonstrate how to clean them properly. Moreover, some households even built a dedicated table to keep the water filter safely placed.

TESTIMONIALS



“I’m pleased to see the people at my village have greater knowledge about stunting and clean water. This topic should be discussed more often to increase awareness and knowledge around the village. We really hope that Kopernik will do more programs like this, and reach all community members of Daha Elu Village.”

- Dodu Tay, Head of Daha Elu Village.

“Thanks to Kopernik, now we know more about stunting and its impact on our children’s health and development. Since Kopernik came, in every Posyandu session, we talk about stunting with pregnant women and mothers of young children. And we are very grateful for the flipchart, height chart, and water filters that Kopernik distributed. These are very useful for us who live here in the rural area.”

- Yeni, a senior cadre of Daha Elu Posyandu.



“The first time I tasted the filtered water, it was very fresh and different from the boiled water I used to drink. Not only me, but my family also enjoys the filtered water, especially my children. Sometimes, our neighbours come to our house just to ask for a glass of fresh and clean water. Before Kopernik distributed the water filters, I only drank 3 glasses of water per day. But now, I drink 9 to 10 glasses of clean water every day. Thanks to Kopernik, now we are more aware of stunting and its prevention in the first 1,000 days.”

- Rati Rada Bera, a mother of a 2 years old child.

Soma Roland contributed to the writing of this report.