



A Report for

# EMERGENCY FOOD DISTRIBUTION ROUND II – FORT DAUPHIN NORTH

---

Monitoring, Evaluation and Learning

December - 2021

## Background

### Context

The humanitarian situation in Madagascar continues to deteriorate, with nearly **1.6 million people nationally – approximately 60% of the southern part of the island’s population – projected to require humanitarian assistance** between June 2021 to May 2022.<sup>1</sup> It is estimated that 500,000 people are facing emergency or worse levels of food insecurity, with 28,000 already living in famine-like conditions and an additional 800,000 experiencing crisis levels of hunger.<sup>2</sup> The region’s most severe drought since 1981 has diminished access to food whilst the socio-economic impact of the COVID-19 pandemic has further exacerbated problems for many.<sup>3</sup>

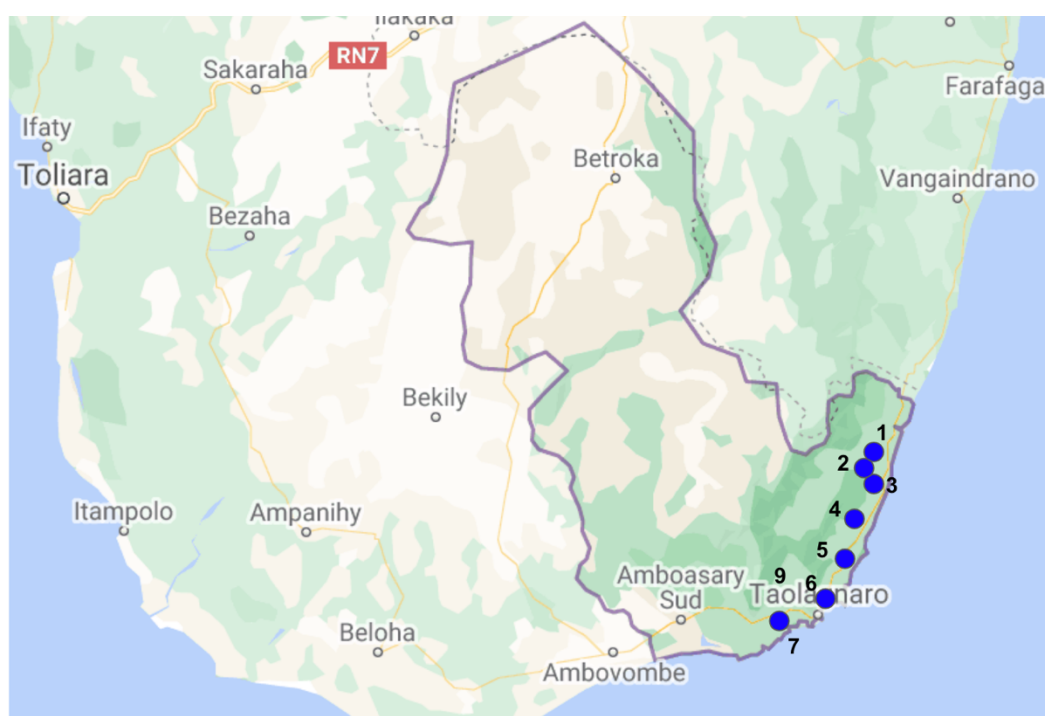
### Emergency Food Distribution as a Response

**SEED Madagascar (SEED) responded to this crisis through the implementation the Emergency Food Distribution Programme, supporting children aged six months to five years with moderate acute malnutrition (MAM) and severe acute malnutrition (SAM). Round II of the project in Fort Dauphin North targets seven rural health centres in five communes, including 41 referring villages – reference figure 1 below.** As part of the Anosy Regional Food Insecurity Coordination Cluster, led by the Regional Office of Nutrition (ORN), a member of the Operational Coordination Centre against KERE (*famine*), and in collaboration with the Medicine Inspector and local community health centres, SEED is operating where no other NGOs are currently supporting emergency food distribution. To improve the capacity of local healthcare workers, SEED trains community healthcare providers to identify, treat, and monitor the recovery of children with acute malnutrition. Children diagnosed with MAM or SAM receive ready-to-use therapeutic food (RUTF), a home-based treatment for malnourished children. Families receive a parcel of unprepared food each month for two months while their child undergoes treatment; each family receives a total of 60 kilograms of rice, 40 cups of beans, and six litres of fortified oil. To support long-term behaviour change, family members receive targeted nutrition and water, sanitation, and hygiene (WASH) information, covering nutrition for children, breastfeeding, identification and treatment of common childhood illnesses, and health-promoting hygiene behaviours.

**Figure 1.** Map of the community health centres targeted in Round II of SEED’s Emergency Food Distribution Programme

#### Fort Dauphin North Sites:

- 1. Sainte Luce
- 2. Tsagnoriha
- 3. Mahatalaky
- 4. Mandromondromotra
- 5. Ampasy Nahampoana
- 6. Soanierana
- 7. Manambaro



## Methods

---

### Data Collection Tools

Data collection included three Open Data Kit (ODK) surveys. The RUTF survey was designed to help ascertain the quantities of RUTF distributed to children with MAM across the seven health centres, and was completed by SEED staff every 15 days. The Unprepared Food Survey was completed by SEED staff every 30 days to track the quantities of rice, beans, and oil distributed to families of malnourished children. The Nutrition Survey was formulated to assess malnutrition recovery over the course of the second round. With the support of SEED staff, all caregivers of malnourished children completed the Nutrition Survey at baseline and endline. This survey recorded household information and children's measurements such as weight, height, and Mid-Upper Arm Circumference (MUAC). Malnutrition recovery was assessed based on the child's MUAC. The tools were designed to be used in the field during distribution days using the ODK Collect App and then uploaded to the Aggregate server to be downloaded for analysis. Survey questions also covered demographic details and caregivers' behaviours regarding health and nutrition. Additional questions were included in the endline nutrition survey to assess the project's impact on beneficiaries' relationships with the health centre. Data collection tools were developed in English and translated into Malagasy. This report also includes information collected through interviews with caregivers of malnourished children, predominately parents, and health centre staff during the food distribution.

### Study Setting and Population

All caregivers of children with SAM or MAM were surveyed with additional inputs regarding the MUAC, weight, and height measurements recorded by the health centre staff. Data were recorded by trained health centre staff, and manually entered into the ODK form by SEED staff members. In the second round of the project, a total of 32 caregivers of children with SAM and 236 caregivers of children with MAM from five communes in the Anosy region were surveyed. Surveys were completed at the health centre, facilitated by a SEED staff member using the ODK software platform. Qualitative data collection was carried out through interviews with a mix of randomly selected beneficiaries and health centre staff.

### Data Analysis

Survey data were uploaded to the ODK Aggregate server from the ODK Collect App on SEED mobile phones. The Monitoring Evaluation and Learning (MEL) Specialist then downloaded and extracted the various datasheets from the three surveys using ODK Briefcase. Data was imported to Microsoft Excel, wherein data cleaning and quantitative analysis were undertaken.

### Ethical Considerations

Prior to data collection, SEED staff members conducted an informed consent process with all participating caregivers and health centre staff. All caregivers and health centre staff provided verbal consent after the aims and research process were explained to them in Malagasy.

## Results

### Survey Results

#### Demographics

RUTF and unprepared food were distributed across seven health centres in five communes in the Anosy region in the southeast of Madagascar. The commune of Soanierana had the highest number of malnourished children enrolled in Round II of the project, with 42.0% of total cases. Mahatalaky had the lowest number of malnourished children, with only 3.7% of total cases.

Female children proved to be disproportionately affected by malnutrition, with female children making up 59.7% malnutrition cases across the five communes.

The average household size was 6.3 with a range of two to 15 people per household. 85.1% of malnourished children came from female-headed single-parent homes. The average age of children with SAM and MAM treated through this project were 20.3 and 21.9 months, respectively.

Table 1: Demographic information of beneficiaries

Question	SAM Cases	MAM Cases	Malnutrition Cases	% Total
<b>Commune</b>				<b>n=268</b>
Mandromondromotra	6	39	45	16.8%
Soanierana	12	102	114	42.5%
Manambaro	5	21	26	9.7%
Ampasy Nahampoana	13	3	16	6.0%
Mahatalaky	0	10	10	3.7%
Saint Luce	3	21	24	9.0%
Tsanghoria	3	30	33	12.3%
<b>Gender of Child</b>				
Male children	16	92	108	40.3%
Female children	16	144	160	59.7%
<b>Average age (months)</b>	20.3	21.9	20.7	-
<b>Who is present in the household?</b>				
Mother	30	198	228	85.1%
Father	0	4	4	1.5%
Both parents	2	33	35	13.1%
Other	0	1	1	0.4%

<sup>1</sup>Average age was measured at endline, two months after baseline.

#### Food Insecurity Experience

100.0% of the families surveyed at baseline and endline reported that they were worried about not having enough money for food in the previous 30 days. At baseline, 0.4% of families reported rarely being worried about not having money for food in the last 30 days, compared to 3.4% at endline. Further, 9.0% of families at baseline reported often (>10 times) being worried about not having money for food in the last 30 days, compared to 0.4% at endline. The majority (97.4%) of families said this was not a result of the COVID-19 pandemic; this remained constant from baseline to endline.



Table 2: Food Insecurity Experience

Food Insecurity Experience	Baseline	Endline
<b>Were you worried about not having money for food in the last 30 days?</b>		
Rarely (1 or 2 times)	1	9
Sometimes (3-10 times)	243	258
Often (more than 10 times)	24	1
Never	0	0
<b>Was it due to the COVID-19 pandemic?</b>		
Yes	7	7
No	261	261

### Food Distributed

In total, 16,080 kilograms of rice, 10,720 cups of beans, and 1,608 litres of oil were distributed to support 268 families with malnourished children across 41 villages. With an average of 6.3 people per household, this round of unprepared food distributions supported approximately 1,700 family members. 14,160 sachets of RUTF were distributed to 236 children diagnosed with MAM. Alongside RUTF and unprepared food distributions, SEED carried out targeted nutrition and WASH information sessions with caregivers of malnourished children enrolled in the project.

Table 3: Food Quantities

Food Distributed	Quantities
<b>Ready-to-use Therapeutic Food (RUTF)</b>	14,160 sachets
<b>Unprepared Food</b>	
Rice	16,080 kilograms
Oil	1,608 litres
Beans	10,720 cups

### Changes in Community Member-Health Centre Relations

Interviews and survey questions examined beneficiaries' trust in and attitudes toward their local health centre, subsequently assessing the project's impact on care-seeking behaviours for general healthcare needs. When asked how their experience has changed after SEED's intervention, 35.1% of caregivers reported an increase in confidence to approach the health centre, and 31.7% reported a decrease in fear associated with visiting the health centre. 5.7% of respondents reported increased awareness about the services provided by the health centre. Three respondents explained they would no longer seek a witch doctor (a traditional healer who is thought to have magical powers) but instead go to the health centre when they need medical assistance. Overall, 97.8% of the respondents said that they are more likely to approach the health centre due to SEED's programming.

***“Being part of it [SEED’s Emergency Food Distribution Project] pushed me to trust the health centre with their healthcare services. The project built a bond between me and the health centre. The health centre has many services that really help poor community members; medications are low cost, and healthcare providers are receiving well patients.”*** - Parent of a malnourished child in Mandromondromotra.

Table 4: Change in Health Centre Experience

Questions	Number	%
<b>How has your experience with the health centre changed?<sup>1</sup></b>		
Increase in confidence to approach the health centre	92	35.1%
Decrease in fear of visiting the health centre	85	31.7%
Increase in willingness to use health centre facilities	7	2.6%
Increase in awareness about the services provided by the health centre	15	5.7%
Increase in willingness to follow instructions given by the health workers	5	1.9%
Increase in trust in the health centre	2	0.7%
Other	62	23.1%
<b>Are you more likely to approach the health centre for other services because of this food distribution project?</b>		
Yes	262	97.8%
No	2	0.7%
No answer	4	1.5%

<sup>1</sup>Coded based on free response

Interviewed health workers reported an increase in community members' knowledge of available health services, such as malaria testing, childbirth delivery kits, and free medication, and attributed this to SEED's Emergency Food Distribution Programme. They noted the importance of this increased awareness, as an increasing number of families are becoming vulnerable to food insecurity and related illnesses. Healthcare centre staff in Soanierana, Ampasy Nahampoana, and Mandromondromotra reported a significant increase in the number of people visiting the health centres and attributed this to SEED's Emergency Food Distribution Programme and the village-wide awareness-raising conducted by trained community health workers.

***“People are coming to the health centre for issues beyond malnutrition, and this is the impact of SEED’s project because community members learn that there are other services to access as well at the health centre apart food for malnutrition.”*** – Health centre staff member at Ampasy Nahampoana

## Targeted Information Sessions

Caregivers of malnourished children received targeted nutrition and WASH information sessions. Topics covered nutrition for children, breastfeeding, identification and treatment of common childhood illnesses, and health-promoting hygiene behaviours, including a handwashing demonstration and distribution of hand soap. Interviews with caregivers revealed that they found these sessions informative, with caregivers reporting changing their practices. Specifically, caregivers reported complementing breastfeeding with additional nutrients for infants aged over six months, ensuring that the food is prepared in a clean way, and seeking treatment at the health centre in case their child becomes ill.

***“SEED’s nutrition education has helped me a lot. The sessions helped me to know that infants aged six-months and older should be fed additional food three times a day, and I should keep breastfeeding until my baby is two years old. Once I started to apply this education, I soon saw my child’s health improve.”*** – Mother of a malnourished child from Soanierana

## Malnutrition Recovery

For children under five, MUAC > 115mms and > 125mms are considered recovery from SAM and MAM, respectively.

**In Round II of the project, all children diagnosed with SAM or MAM fully recovered from malnutrition, representing a 100.0% recovery rate.**

Table 4: Number of children who recovered from Malnutrition (Round II)

Malnutrition Status	Treated	Recovered	Recovery %
Children with SAM	32	32	100.0%
Children with MAM	236	236	100.0%

The average increase in MUAC was 8.8 mms higher for children with SAM compared to children with MAM. Specifically, the average MUAC for children with SAM increased from 108.7 mms at baseline to 126.3 mms at endline, demonstrating an average increase of 17.6 mms. For children with MAM, the average MUAC increased from 121.0 mms at baseline to 129.7 mms at endline, with an average increase of 8.7 mms. From baseline to endline, the average weight increased by 2.6 kgs for children with SAM and by 2.7 kgs for children with MAM.

Table 5: Nutrition Status Measurements

Nutrition Levels	Baseline	Endline	% Change
<b>Children with SAM</b>	<b>n=32</b>	<b>n=32</b>	
Average MUAC	108.7 mms	126.3 mms	16.1%
Average Weight	6.6 kgs	9.2 kgs	39.0%
Average Height	67.8 cms	78.0 cms	15.1%
<b>Children with MAM</b>	<b>n=236</b>	<b>n=236</b>	
Average MUAC	121.0 mms	129.7 mms	7.2%
Average Weight	7.9 kgs	10.6 kgs	34.9%
Average Height	75.2 cms	78.0 cms	3.7%



A child holds RUTF treatment alongside unprepared food, Sainte Luce

## Discussion

---

SEED's Emergency Food Distribution Programme was crucial in protecting the lives of 268 malnourished children and their families in the Anosy region through the distribution of RUTF, unprepared food parcels, and targeted information sessions. Overall, 100.0% of children treated for SAM and MAM recovered during the second round of the food distribution project.

The majority (85.1%) of children enrolled in the project came from female-headed single-parent households, following a global trend wherein single motherhood is a risk factor for malnourishment. Therefore, future interventions may seek to target this added vulnerability specifically. Project staff theorised that this is often because men move away to find work in other regions but may start new families and not return. In the future, SEED aims to expand its Emergency Food Distribution Programme to work towards the recovery and resilience of communities, including empowering women through income-generating activities. The project also revealed that female children were at increased risk of malnutrition, with female children comprising 59.7% of malnourished children enrolled in Round II. Project staff do not attribute this disparity to gender discrimination within households; however, lack of access to population and sex ratio data of the five communes meant this claim could not be substantiated.

Interviews and survey data revealed that most households treated through this project could not afford to feed themselves multiple times over the course of the month before. They described food insecurity to be a result of prevailing drought conditions rather than the COVID-19 pandemic. Therefore, future interventions, particularly the nutrition education sessions, may seek to explore alternate food sources or drought-resistant food production. An additional need expressed by one beneficiary was to include more detailed nutrition education information specifically for pregnant and breastfeeding women. Since maternal health and child health are intrinsically linked, expanding the topics covered by nutrition education could help reduce malnutrition prevalence in the long-term.

SEED's programming is based on international best practice to treat malnourished children. The project strategy of providing RUTF in combination with unprepared food and nutritional education proved to be a highly successful holistic approach, with benefits at the individual and household level. The monitoring and evaluation surveys ensured a highly rigorous methodology to assess the nutritional status of children receiving treatment. The resulting 100.0% recovery rate for children with SAM and MAM is testimony to the effectiveness of this programme strategy. An added benefit of this project was the change in the knowledge, attitudes, and practices of beneficiaries regarding trust in health centres and health-seeking behaviour. An overwhelming majority responded that they were no longer afraid to approach the health centre. Additionally, most beneficiaries stated they were more likely to approach the health centre because of the programme, therefore initiating a long-term impact in healthcare of the region.

Due to SEED's rigorous monitoring and learning throughout the project, findings from Round II have provided further insights into barriers to food distribution and nutrition. The lessons learned from this second round will be incorporated into planning and project development for Round III. Although SEED's Emergency Food Distribution Programme has substantially improved malnutrition rates in the 41 villages SEED is supporting, with a Round II recovery rate of 100.0%, national monitoring and evaluation data from the Ministry of Health has highlighted the increasing need for a continued response.

With food insecurity escalating in southeast Madagascar at an alarming rate, SEED is expanding its food distribution work to continue supporting malnourished children and their families. SEED is on track to continue providing nutritional support to the project's existing beneficiaries, with Round III of the project scheduled to commence in February 2022. The Emergency Food Distribution Programme has also expanded to include eight additional health centres and their 45 referring villages to address the worsening situation across the region.



## References

---

<sup>1</sup> US Agency for International Development. "Madagascar – Drought Fact Sheet #1 Fiscal Year (FY) 2021 - Madagascar." *ReliefWeb*, 30 Sept. 2021, [reliefweb.int/report/madagascar/madagascar-drought-fact-sheet-1-fiscal-year-fy-2021](https://reliefweb.int/report/madagascar/madagascar-drought-fact-sheet-1-fiscal-year-fy-2021).

<sup>2</sup> WFP. "Country Plans Highlighting Needs to Face Famine | Madagascar Country Profile." *WFP*, 15 Nov. 2021, [www.wfp.org/publications/country-plans-highlighting-ipc-4-needs](https://www.wfp.org/publications/country-plans-highlighting-ipc-4-needs).

<sup>3</sup> ReliefWeb. (2021, 11 May). *Southern Madagascar | Response overview (May 2021)*. Available at: <https://reliefweb.int/report/madagascar/southern-madagascar-response-overview-may-2021>. Accessed 26 May 2021.