

**Medicines for Humanity Final Results Report
Narrative Cover Page**

Reporting fiscal year	FY2022
Awardee name	Medicines for Humanity
Host/implementation country	Haiti
Award number	72DFFP20FA00012
Award name	Increasing Healthy Food Consumption and Preventing Malnutrition Among Families in Haiti
Activity start date	September 30, 2020
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Acronym List

ANC	Antenatal care
AOR	Agreement Officer's Representative
CHW	Community Health Worker
CU5	Children under 5 years old
FFP	Food for Peace
HLP	Harvest Lentil Pro
IFRP	International Food Relief Partnership
LSST	Little Sisters of Saint Therese
MCH	Maternal and Child Health
MFH	Medicines for Humanity
MSPP	Ministry of Health and Population
MT	Metric tons
MUAC	Middle Upper Arm Circumference
Nutributter	Enov'Nutributter
PLW	Pregnant and lactating women
PNC	Postnatal care
SPSS	Statistical Package for the Social Sciences

Award Summary

Medicines for Humanity (MFH) successfully implemented the FFP-funded IFRP project, *Improving Healthy Food Consumption and Preventing Malnutrition Among Families in Haiti*, and achieved all of the planned outputs and outcomes. This project sought to increase access to nutritious food products among 29,665 people in rural and urban Haiti by distributing Harvest Lentil Pro (HLP) and Enov'Nutributter (Nutributter) and successfully achieved the goal of families reached. The project specifically targeted children under 5 (CU5), school-aged children, pregnant and lactating women (PLW), and the elderly. During the 18-month project period, MFH completed all three of the agreed upon milestones. The entirety of the HLP and Nutributter products were transported to Haiti in FY2021, delivered to eleven partner sites throughout the country, and distributed to targeted children and adults according to the implementation plan. MFH team and partners were able to distribute all of the product and monitor the outcomes.

Activity Achievements

Shipments/deliveries of HLP and Nutributter

In October 2020, MFH, coordinating with staff from Breedlove Foods, organized the shipment of four 40-foot HLP containers and one 20-foot HLP container from Texas to Haiti. MFH also organized the shipment of one 40-foot container of Nutributter from Edesia Nutrition's headquarters to Haiti. The shipments of all six containers (a total of 86.38 MT of HLP and 17.28 MT of Nutributter) was completed in January 2021 and arrived at Port Lafito, Haiti. Local transportation companies contracted by MFH transported the commodity from the port to eleven partner locations throughout Haiti. MFH and its partners verified that the appropriate amount of product, based on the population of target children and adults, was received and properly stored at each clinic.

Distributions

MFH staff collaborated with partners at each project location to ensure effective and safe distribution of HLP and Nutributter, with special attention to COVID-19 prevention strategies. The distribution method varied by location through 5 routes: antenatal clinics (ANC); postnatal clinics (PNC); established nutrition programs treating malnourished CU5; school feeding programs; and elderly homes. Partner staff were trained on methods of distribution, registration forms, electronic data collection, and follow up requirements. Special forms for ANC and PNC distributions were created and included in the patient charts to track ANC and PNC distribution of HLP more accurately. The product was distributed in the following ways:

- **Nutributter/HLP distribution:** The program distributed Nutributter and HLP at eight sites targeting children between 6 and 24 months old (Aquin, Marbial, Grand Boulage, Grand Goave, La Tortue, La Croix, Boneau, St. Louis de Sud). Distribution was conducted at the clinic level using nurses in charge of distribution, and with the assistance of Community Health Workers (CHWs) to provide follow up and outreach. Project staff and CHWs utilized a digital registration process to identify and enroll children aged 6-24 months into the program. Children and their caregivers then attended monthly distributions where staff recorded the child's age, weight and height and recorded it into the digital monitoring system (through CommCare). The caregiver was then given a 30-day supply of Nutributter, instructed on how to feed the child, and

when to return with the empty sachets. The caregiver also received two 1-kg ration of HLP to supplement family meals and further assist the family so that the Nutributter was utilized for the targeted child and not shared among others. Before each clinic distribution, the nurse counselled caregivers, provided nutrition education, discussed the value and use of Nutributter and HLP and continued breastfeeding, along with key messaging on the need for a healthy, complimentary diet for children and how to achieve this. A total of 4,992 children were enrolled in the Nutributter program with a total of 32,448 family members benefiting from the related HLP distribution. 4,584 of them finished the 6-month distribution of Nutributter and HLP and the remaining 408 children and their caregivers did not return for follow-up, receiving less than 6 months of supplementation.

- **Clinic nutrition programs:** The project coordinated with existing nutrition programs at five sites (Riviere Froide, Cite Soleil, Sibert, Aquin and Grand Boulage) to provide HLP for CU5 diagnosed with malnutrition. The caregiver of each child enrolled in the 6-month program received Plumpy'Nut sachets to treat malnutrition and one bag of HLP each week to provide additional food for their family. The ration is intended to provide one meal per day per person for one week for a family of 5, while also providing sufficient food for the malnourished child and ensuring the mother does not have to neglect or limit food to her other children. The program enrolled 428 children with a total of 2,423 family members.
- **ANC/PNC:** Distribution of HLP at ANC/PNC visits was done at four clinics (Riviere Froide, Vieuxboug d'Aquin, Grand Boulage and Sibert). Women who attended antenatal visits at the clinics were enrolled in the program and received 2 bags (2kgs) of HLP each month after their visit. Each ANC visit also included education from the nurse-midwife and/or doctor on proper nutrition during pregnancy and the importance of iron/folic acid supplements. The monthly ration was intended to be shared among a family of 5 (the average household size for the area), allowing for each mother and her family to receive a proper supplementation of food each day. A total of 265 women were enrolled in the ANC/PNC distribution and were followed through delivery. Women received HLP supplements during their pregnancy and for up to three PNC visits. The total number of people benefiting from the HLP product was 2,002. CHWs increased the number of home visits to pregnant women to encourage them to still attend ANC visits at the clinic.
- **School feeding program:** The project distributed HLP at one primary school in Grand Goave that did not have an institutional feeding program or other nutrition support programs. HLP was provided to the school director, who organized monthly distributions where each child received 3 bags of the product to take home and share among a family of 5 people. This distribution method reached 300 children and a total of 1,684 family members.
- **Elderly programs:** Distribution for elderly adults was completed at Sibert benefiting 140 adults. The product was distributed through take-home rations to elderly adults

that typically participate in an institutional feeding program. Staff and CHWs ensured that each elderly adult received their take-home rations to benefit themselves and their family members. A total of 954 family members were reached through this distribution method.

Output and Outcome Report

The goal of this project was to increase access to healthy nutritious food products for 29,665 individuals (CU5, school-aged children, pregnant and lactating women, and elderly adults) through distribution of HLP and Nutributter. During the 18-month period the project reached a total of 39,511 people, 33% more than anticipated. The gender breakdown of the population reached was 18,562 males and 20,949 females. The total number of people reached with the product was higher than anticipated due to larger than expected family sizes in most communities and additional children entering the Nutributter program when others were lost to follow-up. The chart on the following page provides an overview of beneficiaries reached at each site.

Partner Name	Site	Planned # of beneficiaries receiving HLP	Actual beneficiaries reached with HLP	Planned # of beneficiaries receiving Nutributter	Actual beneficiaries reached with Nutributter
Little Sisters of Saint Therese	Riviere Froide	940	1,268	0	0
	Vieuxboug d'Aquin	4,375	5,941	650	679
	Maribial	2,500	3,250	500	500
Daughters of Charity	Cite Soleil	450	575	0	0
	Sibert	1,150	1,463	0	0
Seeds of Hope for Haiti	Grand Boulage	2,500	3,198	400	408
Haiti Arise Ministries	Grand Goave,	5,000	6,390	700	724
Daughters of Divine Love	La Croix	3,250	4,947	650	761
	Boneau	3,000	3,978	600	612
Missionaries of St Therese	La Tortue	4,000	5,226	800	804
Sisters of Charity of St. Hyacinthe	St. Louis de Sud	2,500	3,276	500	504
	Total	29,665	39,511	4,500	4,992

The actual cost per beneficiary is \$5.06 over the 18-month distribution period. This cost was calculated by taking the total project cost of \$200,000 divided by the number of beneficiaries 39,511. The distribution time varied from 6 months to 12 months depending on the distribution method described above. Most beneficiaries received an average of 6 months of distribution; therefore, the monthly distribution cost is calculated to be \$0.84 (\$5.06 per beneficiary divided by 6 months).

Throughout the project MFH monitored the progress of activities and indicators. Below is a brief overview of the specific project outcomes achieved.

Process Indicators:

Number of children and adults who receive HLP during the project period

The total number of participants who received HLP during the project period is 39,511. This includes CU5, pregnant women, school children and adults who participated in the 5 distribution methods and their family members. This information was gathered from distribution forms and tracking sheets at each partner site.

Number of children aged 6–24 months who receive Nutributter during the project period

By the end of the project, a total of 4,992 children aged 6-24 months were provided with Nutributter supplements. MFH was able to reach more children than anticipated because some children and their caregivers did not return for additional distributions. This allowed us to un-enroll some children and enroll new, eligible children. Digital distribution logs were created for each of the sites that included the name of the child, age, starting MUAC measurement and a unique ID number. Each month during distribution, the child was weighed and their height and MUAC measurement were taken, and all were recorded in the log. The number of Nutributter packets was also recorded. The distribution logs were used to verify the total number of children in the project and those that received the full six-month supplementation.

Number of households/caregivers who receive nutrition education during the project period

All direct participants and caregivers in the Nutributter distribution, ANC/PNC, nutrition programs, school feeding, and elderly care received targeted education on nutrition and the benefits of the food products before leaving the distribution site. The total number of people reached is 6,125.

MFH and its project partners conducted a knowledge, attitude, and practice assessment of the caregivers of young children in the target communities in March 2022. Results were compared to a similar assessment conducted in 2020 with the communities in MFH's previous IFRP grant that was utilized as the baseline assessment. Of the respondents, 77% reported that their child participated in the Nutributter/HLP distribution project, and there were improvements in knowledge related to child nutrition, including:

- At endline, approximately 95% of caregivers knew that breastmilk is the ideal food for infants under six months and solids should be introduced at 6 months or later, compared to 94% at baseline.

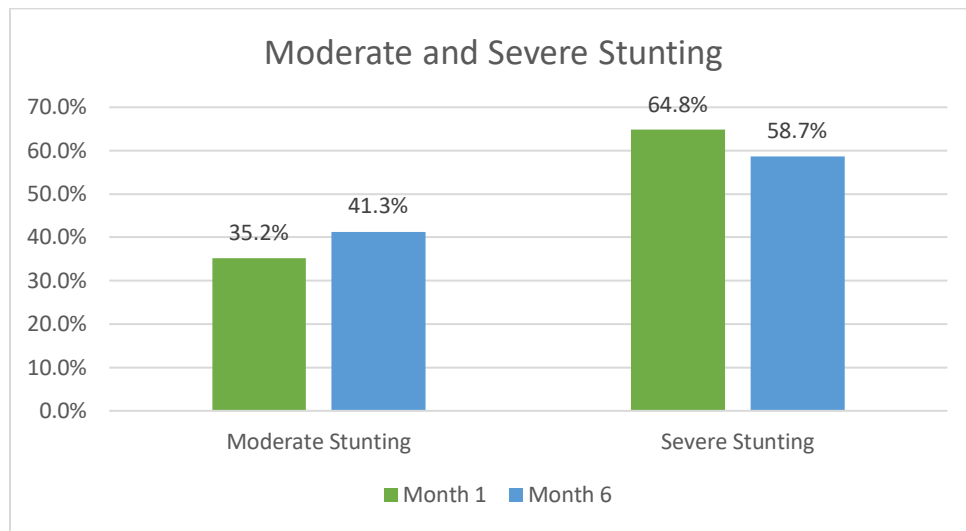
- At baseline 88% of caregivers believed that malnutrition was a very serious concern for their children. At endline 90% of caregivers saw malnutrition as a serious matter.

Outcome Indicators:

Decrease in the percentage of children with stunting in the target areas by the end of the project period (through growth monitoring)

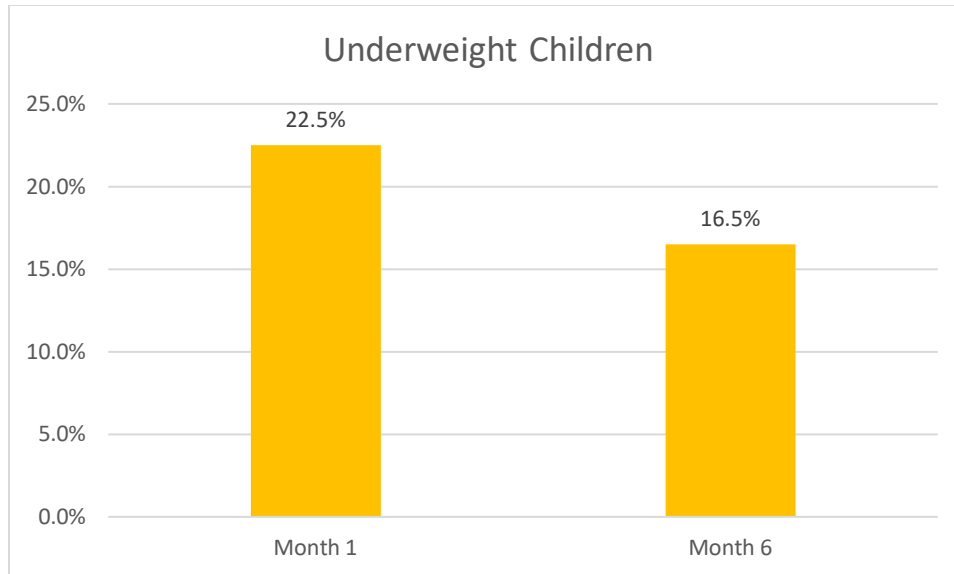
Upon registration into the Nutributter project, each child’s age in months and MUAC measurements were recorded. At every distribution, the clinic nurse and CHWs monitored MUAC measurements, weight, and height to determine changes in individual children. These distribution forms were collected from partners at the end of the project to analyze changes in height, weight, MUAC and stunting rates. MFH took a statistically significant sample of 249 children (utilizing sample size protocol for nutrition assessments) to analyze the change in height, weight and MUAC from the first distribution to the last distribution. Data was analyzed using SMART’s Emergency Nutrition Assessment (ENA)¹ software that calculates Z-scores for various nutrition indicators including stunting, global malnutrition and underweight.

The graphs below show rates of moderate and severe stunting and underweight from sampled children from month 1 to month 6 of Nutributter distribution.



Graph I: Moderate and severe stunting rates of children who were stunted from month 1 to 6 of Nutributter distribution.

¹ SMART Emergency Nutrition Assessment software. Available at <https://smartmethodology.org/survey-planning-tools/smart-emergency-nutrition-assessment/>



Graph 2: Underweight children (Weight for Age Z score of -2 or lower) from month 1 to 6 of Nutributter distribution.

Assist in decreasing the number of babies born with low birthweight in target clinics by the end of the project.

Data from target clinics was collected in FY2020 to determine the number of babies born with low birthweight at the 3 clinics. The project team monitored women enrolled in the program who received HLP during ANC visits and followed up for at least one PNC visit. The program then monitored the birthweights upon delivery. This number varied significantly across the 3 sites conducting ANC distribution as seen in the table below. The project’s goal was to reduce the number of low birthweight babies in the clinics to 10% of babies or less. This was accomplished in 2 of the 3 sites.

Site	Low Birthweight in 2020	Low Birthweight in 2022
Aquin	4%	7%
Grand Boulage	12%	10%
Riviere Froide	10%	9%

Decrease in the number of pregnant women with anemia in target antenatal clinics by the end of the project.

Baseline data was taken from clinics implementing ANC/PNC distribution to determine the percentage of pregnant women with anemia. Women receive hemoglobin blood tests during ANC visits to determine if they are anemic. The women enrolled in the project also received tests for anemia at the beginning of their pregnancy and again at between 37 and 40 weeks of gestation. An average of 51% of women enrolled in the HLP distribution project were anemic at their first visit, but after completing ANC visits and receiving HLP supplements, approximately 88% of these women’s anemia was treated.

Gender Needs

This project specifically targeted vulnerable groups of people in Haiti including CU5, pregnant women and elderly adults. MFH and partners ensured that all eligible participants enrolled in the project to received HLP and Nutributter regardless of gender, economic status, or religious affiliation. The number of beneficiaries reached in the project was an equitable distribution of about 47% male and 53% female.

Project Learnings

The implementation of this IFRP project has been very successful and impactful for communities across Haiti, especially during a time of increased food insecurity due to economic changes, political insecurity, and worsening living conditions in Haiti. MFH continues to build on its strong network of partners and CHWs who provide essential services in the community to provide the nutritious food products and preventive treatments to those who need it the most. The food products chosen for distribution and the modalities of distribution proved to not only be appropriate for the context, but also timely due to increased food insecurity. HLP was well received by participants and could be easily adapted to create several local meals such as a soup with added vegetables, an entrée with additional rice, and a side dish to other foods, like chicken or goat. Nutributter was also chosen to compliment nutrition efforts that prevent malnutrition among young children in vulnerable communities. While Nutributter is seen as an effective product, it is more challenging to distribute due to the nature of follow-up needed. Some caregivers do not place value on the product and will not return for follow up to the clinic. This project utilized learnings from the previous two IFRP projects to provide the most effective distributions across all sites and all distribution methods. This allowed for smooth operations in HLP distribution and minimized concerns with Nutributter distribution since we were able to prepare more effectively from previous projects.

Although the impact of the COVID-19 pandemic has been less severe in Haiti than in other countries, our project team and partners continued to ensure patient safety while in the clinics and distribution sites to avoid potential exposure to COVID-19. Distribution sites continued to use personal protective equipment and hand sanitizer to prevent the spread of the virus. Continuing the distribution was particularly impactful since many families had lost their livelihoods as a result of the pandemic and food prices in the local market were soaring due to recent economic shifts throughout the country.

We continued to see the critical benefit of CHWs in supporting the distribution of both HLP and Nutributter. CHWs at all sites were critical to reaching families with vital information about nutrition and the benefits of the food products and encouraging families to come to the distribution sites regularly. MFH developed job aids that demonstrated how to use HLP, including local food products in the cooking process, provided instruction sheets on the preparation of HLP, and provided families with information on the benefit and use of Nutributter. This proved to be highly useful and influential with families, especially since this was the first time many families had ever received the product. These tools were an important component to creating appropriate and successful utilization of the food product.

MFH also continues to have success in lowering the rates of low birthweight and women with anemia in target communities. It is evident that the utilization of HLP as an incentive for

completing ANC visits, along with the integration of prenatal vitamins, had a significant effect on reducing anemia in these communities. Eighty-eight percent (88%) of the women who were anemic when they entered the program were successfully treated by their delivery date. Additionally, the percent of babies born with low-birthweight was reduced in two of the three program communities. (The third community was impacted by the deadly August 2021 earthquake). This is a tremendous step forward to ensuring safe delivery of children and less risk to the mother and baby. Incentive programs of this nature should be strongly considered in locations where there is great risk to mothers and this simple addition can make such a substantial difference in outcomes. It would be interesting to engage in longer term follow up to review the birth results of these mothers to make a more accurate conclusion on the impact to mothers and babies.

While the project saw many successes there continued to be challenges regarding country security. The political violence and insecurity seen throughout Haiti in 2019 continued and worsened with the presidential assassination in July 2021. There was a significant increase in the number of political protests, demonstrations, and unrest that led to a shutdown of public services such as schools, banks, and clinics. Gang violence in poor urban areas, such as Cite Soleil and Riviere Froide, continued to intensify with longer periods of disruption and turmoil than in the past. Many families throughout urban areas were forced to flee their homes causing concern across the country. While these concerns did not directly impact the communities served in this project, the insecurity affected the transportation of products and the need to ensure heightened security at distribution points. Our project team increased communication with partners to oversee security and utilized appropriate methods to ensure safe transportation during any program activity.

Overall, MFH and our partners are extremely satisfied with the progress, adaptations, and impact of this IFRP project, especially in light of some significant challenges faced during this time.

Pictures from Harvest Lentil Pro and Nutributter Distribution



Nurses taking MUAC measurements and weighing children in the Nutributter distribution program in one of the target communities.



Family members eating prepared HLP in one of the target communities.