



Fund for Innovation
and Transformation

Fonds pour l'innovation
et la transformation



LUCKY IRON FISH INC.

Improving Resilience to Increase Nutritional Outcomes for Women and Children in Benin

Context

Iron deficiency anemia (IDA) is the most common nutritional disorder in the world. It limits cognitive development in children, predisposing them to infection and reduced energy levels, which can lead to decreased school attendance and even death. In adults, anemia reduces work productivity and can lead to poor pregnancy outcomes. In Benin, the social and economic costs of anemia are huge, with median estimates of GDP loss as high as 4%.

The Innovative Solution

Supported by FIT, Lucky Iron Fish Enterprise (LIFE) and CARE Benin/Togo tested an innovative solution aimed at reducing micronutrient deficiencies in women using digital tools (WhatsApp, texts or calls), speaking books (books that have recorded audio activated by pushing a button) and radio programming. Leading up to this testing period, these organizations had been working to address anemia in Benin by promoting the use of the Lucky Iron Fish, a scientifically proven tool used to fortify meals with natural iron and reduce the prevalence of anemia in women and children. Each Fish can be used for five years. Training on how to use the Fish was typically conducted in large group settings and included cooking demonstrations. This innovation sought to continue this work while mitigating the effects of COVID-19 by providing an alternative to face-to-face interactions. The innovation also sought to empower women to make nutritional and economic decisions in their household through messaging aimed at both men and women.

Advancing Gender Equality

The innovation was designed to be gender responsive and to explore ways of changing the perception of a woman's role in the household. Part of this strategy included working not only with men and women in the region, but also engaging with community and religious leaders. The team on the ground recruited and trained community health workers, actively engaged women in support groups and developed a series of communication messages using different media to educate and reinforce information on iron, as well as the importance of including women in household decisions around nutrition. Messages on gender equality were shared on WhatsApp to enhance women's leadership. In addition, twenty-seven new village savings and loan association groups were established with around 700 women. These groups were trained on effective group participation and discussion, and provided with information about adequate and appropriate



COUNTRY
Benin

AMOUNT
\$231,559

TESTING PERIOD
15 months
Ended August 2022



GENDER TRANSFORMATIVE (GE3)

THEME: EDUCATION

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Testing Framework

A baseline survey was conducted at the start of the project and compared with an end-line evaluation. The action research applied a multilayered approach to data collection to report against key research questions and performance indicators using both quantitative and qualitative methods. The project reached 2500 households with educational messaging about nutrition and women's empowerment. In order to test the effectiveness of reducing iron deficiency anemia, 125 of these were part of the randomized controlled trial which provided participants with education on anemia, the importance of adequate nutrition and a Lucky Iron Fish. This intervention study group was compared to 125 women with similar characteristics in a control site, but who were not given a Lucky Iron Fish. All received a blood test to measure hemoglobin levels and anemia. The project used small in-person focus group discussions, in-depth in-person interviews, and other participatory methods to promote the use of the Fish and assess and describe changes in the context. The project compiled data collection via interviews and information shared by VSLA members/trainers through the train the trainer program.

Results and Impact

Progress on the test was delayed by a series of socio-economic and health challenges that emanated from the COVID-19 pandemic and the steps taken to minimize impact in Benin. These included the physical challenges created by COVID-19 restrictions and the disruptions of supply chains. The latter not only affected the diversity and volume of food available in the markets, but also directly impacted the supply of critical components used in the project. Despite this, the overall data demonstrates that including regular use of the Fish in preparing meals has a positive impact on the iron status of women. There was a 31.8% decrease in anemia in the experimental group versus a 6-7% reduction in the control group. There was a significant improvement in knowledge of anemia. At the start of the trial only 20% reported hearing about anemia but by endline 100% of the women indicated that they had heard of the condition. By endline, the women were more knowledgeable about the signs and symptoms of anemia and knowledge of iron rich foods and ways to enrich meals with iron increased from 8% to 86%. The level of women's decision-making roles for better household nutrition increased from 11% at baseline to 21% at endline.

Key Lessons

1. The back-translation of materials was not provided as part of the workplan, which is a vital step in ensuring the integrity of the meaning of specific questions and messages is maintained.
2. The number of participants who did not continue participating in the clinical trial was greater than expected. Messages that contained misinformation circulated amongst the women from religious leaders, from which LIFE realized that continuity of messaging and support from community leaders was vital to maintaining confidence in and adherence to the project.

PARTNER ORGANIZATION

CARE Benin/Togo

TARGET PARTICIPANTS

3,155 people (2,928 women and 227 men)
trained to use the Lucky Iron Fish

FOR MORE INFORMATION

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ABOUT FIT

The Fund for Innovation and Transformation supports Canadian small and medium-sized organizations (SMOs) testing innovative solutions that advance gender equality in the Global South.



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"My nine-year-old son has sickle cell anemia and has received blood transfusions and suffers from jaundice. We regularly go to the hospital because of his condition. This year I had the chance to benefit from the distribution of the Lucky Iron Fish by CARE Benin/Togo. Over the days, I have observed a change in my child, who is no longer pale as usual - and the good news is that we did not spend a stay in the hospital this December 2021."

- Woman participant