

A conversation with the Food Fortification Initiative, June 12, 2018

Participants

- Scott Montgomery – Director, Food Fortification Initiative
- Laura Rowe – Deputy Director, Food Fortification Initiative
- Sarah Zimmerman – Communications Coordinator, Food Fortification Initiative
- Chelsea Tabart – Research Analyst, GiveWell

Note: These notes were compiled by GiveWell and give an overview of the major points made by the Food Fortification Initiative.

Summary

GiveWell spoke with Mr. Montgomery, Ms. Rowe, and Ms. Zimmerman of the Food Fortification Initiative (FFI) to learn about FFI's progress and future plans. FFI is a GiveWell standout charity. Conversation topics included progress FFI has made since GiveWell's last update in October 2017, FFI's plans for the future, and its room for more funding.

Progress since our last update in October 2017

FFI works to reduce micronutrient deficiencies globally by promoting and providing technical assistance for the fortification of rice and flour with vitamins and minerals.

Hiring

FFI has hired new staff since GiveWell's last update in October 2017, including incoming Deputy Director Laura Rowe, who is highly experienced with monitoring and providing in-country assistance to governments.

Fortified wheat flour program in Haryana, India

FFI has been working with the Haryana state government for three years. The relationship began with FFI mapping Haryana's cereal grains supply chain from production to consumption and presenting this analysis to state government officials in January of 2016. Based on the fact that 50% of the state's population consumes wheat that is distributed through the Public Distribution System (PDS), FFI successfully proposed converting Haryana's model for the public distribution of wheat from providing whole kernels to providing flour fortified with iron, folic acid, and vitamin B12.

Conversion of the PDS for wheat began in two blocks of the Ambala district, and by September 2018 will scale up to the rest of the Ambala district and expand to the Karnal district. After its expansion to two districts is complete, the program will be reaching 1.3 million people with 220 metric tons of fortified wheat flour daily. The government is still in the tender process for expansion to two districts. The program's ultimate goal is to operate statewide, reaching 13 million individuals.

FFI has been providing technical assistance throughout the implementation of Haryana's fortified wheat flour program. FFI estimates that it contributes 80% of the technical support for the project, with government efforts and political will constituting the other 20%.

Sustainability

FFI's analysis of the cereal grains supply chain in Haryana indicated that consumers purchase publicly distributed wheat kernels for two rupees per kilo and pay an additional three rupees per kilo to have the kernels ground into flour at a local mill. At scale, FFI's model for producing fortified wheat flour costs approximately five rupees per kilo. Therefore, consumers who purchase the fortified product would receive necessary micronutrients and avoid traveling to mills without incurring an additional cost.

If successful, Haryana's conversion of its PDS for wheat will represent the first self-sustaining, large-scale cereal grain fortification program in India. FFI hopes that the program in Haryana will serve as a replicable model for other Indian states, such as Maharashtra.

Monitoring

FFI is assisting with the development of monitoring systems for Haryana's fortified wheat flour program. Over the next year, FFI will train both government officials and millers on proper monitoring protocols.

For the scale-up to two districts, monitoring will include mill inspections, with noncompliance resulting in millers losing their government contracts.

Rice and wheat fortification in the Solomon Islands

Legislation mandating rice fortification

The fortification of wheat flour is already mandatory in the Solomon Islands. In addition, FFI has been working with the national government to advocate for mandatory rice fortification, which it believes will be signed into legislation within the next two months. Simultaneously, FFI is working with the government to develop monitoring processes for rice fortification. This will include monitoring practices and protocols relevant for both domestic producers of rice and importers of rice, the latter being particularly important since most of the rice consumed in the Solomon Islands is imported. FFI is also working with the main companies that export rice to Solomon Islands to ensure their understanding of and ability to comply with the proposed legislation.

Monitoring of wheat flour fortification

Unlike many other nations, Solomon Islands has only one wheat flour mill, making monitoring a relatively simple task. Monitoring activities that FFI conducts include training mill inspectors as well as reviewing data from micronutrient premix suppliers and mill inspections.

Update: FFI has requested and, as of July 2018, received up-to-date internal and external monitoring data from the mill. The external monitoring data comes from an audit conducted by the Ministry of Health and Medical Services in June and indicates compliance with the wheat flour fortification standard. Only minor food control issues were identified. Internal monitoring data comes from the mill's production and spot test logs, which also indicate compliance with the national standard.

Based on the internal and external monitoring data received, the mill producing fortified wheat flour in the Solomon Islands is achieving 100% compliance with current fortification standards.

Legislation mandating wheat flour fortification in Mongolia

FFI has been informed that mandatory wheat flour fortification has been signed into legislation in Mongolia, a country FFI has worked with periodically for several years. Many partners, including UNICEF and academics from Harvard University, were involved in advocating for wheat flour fortification in Mongolia. FFI estimates its contribution to the passage of legislation at 20%, primarily due to its efforts to allay concerns of iron overload and its work on developing standards for the types and amounts of micronutrients to be used in fortification.

FFI will not recognize Mongolia's fortification legislation on its website until it receives official documentation of the new legislation.

Legislation mandating wheat flour fortification in Malaysia

Standards for wheat flour fortification have been drafted for public comment in Malaysia. The Malaysian Ministry of Health has waited to submit the standards to the Attorney General until after the recently elected members of Parliament have been installed. FFI believes that a formal declaration of standards should occur within the next few months and is developing a strategy to maintain pressure for fortification legislation in Malaysia.

FFI and UNICEF are the primary organizations advocating for wheat flour fortification legislation in Malaysia, although various government actors and civil society organizations are also involved.

Technical workshops in Africa

FFI organized stakeholders in Africa for three technical fortification workshops, each of which had a different goal:

- **Introductory rice fortification advocacy** – FFI and the World Food Programme convened 17 national leaders from eight countries in West Africa to introduce and advocate for rice fortification. This workshop was the result of FFI's extensive analysis of West Africa's rice supply chain, which identified 12 nations in the region as opportunities for rice fortification. FFI also developed a comprehensive plan of how these nations could scale up production to reach a total of 146 million people, which would represent the first example of rice fortification operating at

a large scale globally. This will drive down the cost of supplying fortified rice globally. After the workshop, attendees expressed interest in the potential of rice fortification, asking FFI how fortification programs could be specifically tailored to different nations. However, FFI does not yet possess sufficient funding to put substantial efforts behind scaling up rice fortification programs in West Africa.

- **Fortification specialist training** – Many countries in Africa have passed legislation mandating food fortification. FFI believes that in order for fortification programs to be successful, African nations must internally develop fortification specialists that are able to facilitate program implementation. Consequently, FFI gathered 22 individuals from 11 countries in East and Southern Africa for a “training the trainers” workshop, which sought to provide these individuals with the technical skills necessary to train more cohorts of fortification specialists. FFI has already hired two attendees of the workshop to work on one of its projects in Africa.
- **Quality control and quality assurance training** – In order to ensure that maize and wheat flour fortification programs are implemented correctly, FFI assembled 65 people from eight countries in Southern Africa for a workshop that taught principles of quality control and quality assurance.

For its upcoming workshops, FFI will begin conducting formal, before-and-after surveys that evaluate what participants learned and how they are applying this knowledge.

The Global Fortification Data Exchange (GFDx)

The GFDx is an interactive, online tool enabling analysis and visualization of global food fortification data, which can be useful for countries that are planning fortification programs. The Iodine Global Network (IGN), the Global Alliance for Improved Nutrition (GAIN), and FFI each populate the GFDx with data from their respective organizational databases. FFI, which has significant expertise in building and maintaining fortification databases, is responsible for contributing data on wheat flour, maize flour, and rice fortification.

Over the past year, FFI has continued to populate the GFDx with the data it regularly collects. A new version of the platform, which will include additional indicators, will be released in early 2019.

Monitoring

FFI is still determining how the GFDx is being utilized by those who access the database and how it can be improved. It knows that from September 2017 to June 2018, individuals from 140 different countries visited the GFDx website. FFI also knows that its country profiles, which provide the same data used to populate the GFDx, account for approximately 23% of its website traffic.

Plans for the future

Country-level technical assistance

Every year, FFI assesses the fortification status of each country within priority regions in order to identify the countries that require but are not receiving technical support for fortification. It has identified 11 countries (Zimbabwe, Nigeria, Mozambique, Sudan, Egypt, Morocco, Algeria, India, Vietnam, the Philippines, and Sri Lanka) for technical assistance work in 2018. The types of technical assistance FFI will provide to these countries include:

- Supporting the creation of a strong regulatory monitoring system in Zimbabwe, Nigeria, Sudan, and Morocco.
- Mapping Egypt's wheat flour supply chain and working with the national government to reestablish a fortification program.
- Engaging government partners in Algeria around the design of a national fortification program and identifying priority areas where technical assistance is needed.
- Working in India to scale the Haryana model ensuring that priority states are producing and distributing quality fortified wheat flour.
- Providing technical support to millers to implement Vietnam's wheat flour fortification legislation and supplying technical support to the government ministries on proper monitoring systems.
- Modifying existing fortification standards in the Philippines to incorporate folic acid.
- Advocating for legislation that mandates the fortification of wheat flour in Sri Lanka.

FortifyMIS training

In four of the countries it has identified for technical assistance work in 2018 (Zimbabwe, Nigeria, Mozambique, and Sudan), FFI will provide training and implementation support for FortifyMIS, an online system that helps governments manage data collection on the quality of fortified foods.

Continuation of work on the GFDx

FFI will continue tracking global data on cereal grain fortification in order to update the GFDx as well as the country and region profiles on its website.

Monitoring of country-specific reach

FFI hopes to gather data that will better explain the true status and reach of fortification programs in the countries where it currently operates. Using wheat flour fortification as an example, FFI would like to be able to compare the baseline reach of wheat flour, the percentage of wheat flour "actually" being fortified, and the percentage of wheat flour being "adequately" fortified. The percentage of "actually" fortified foods will be collected from food production facilities, and the percentage

of “adequately” fortified foods will be determined by reviewing monitoring data collected by regulatory inspectors.

Data quality verification

FFI will review the tests and equipment used by regulatory inspectors to monitor food production facilities in addition to ensuring that inspectors are properly trained. It is possible that the fortification data FFI receives will be false, but it believes this outcome is unlikely.

“Pull” projects in Malawi and Uganda

FFI will be piloting projects in Malawi and Uganda that intend to increase compliance with fortification legislation through a “pull” strategy, mobilizing consumer advocacy and child disability groups to conduct targeted market sampling of available fortified products. FFI would only consider implementing “pull” programs in countries where cereal grain products are not being adequately fortified and regulatory structures are not strong enough to implement “push” strategies (enforcement of legislation).

The success of FFI’s “pull” projects could serve as an indicator for whether utilizing civil society groups to monitor the performance of fortification programs is a viable alternative to relying solely on government regulation.

Process

FFI will meet with civil society groups and train them on how to conduct market sampling of fortified food products, which will involve analyses of labels as well as tests of nutritional composition. FFI will then synthesize overall findings from the data gathered and build a strategy for disseminating results to media.

Room for more funding

Budget

FFI’s 2017 budget of \$2.06 million was comprised of:

- **Government funding** – 59% of FFI’s budget came from government sources including the Australian Department of Foreign Affairs and Trade (for work in the Solomon Islands), the US Centers for Disease Control and Prevention, the Dutch Ministry of Foreign Affairs (\$400,000 for work in Africa), and USAID.
- **Corporate funding** – 19% of FFI’s budget came from corporate support.
- **Funding from non-governmental organizations (NGOs) and intergovernmental organizations (IGOs)** – 7% of FFI’s budget came from NGOs including GAIN and Nutrition International as well as the IGO UNICEF.
- **Funding from individual donors and foundations** – 14% of FFI’s budget came from individual donors and family foundations, largely directed by GiveWell.

FFI expects to also have a budget of \$2 million for 2018 and 2019.

Allocation

FFI's budget is allocated equally among country-specific technical assistance, regional technical assistance, and global tracking.

Use of additional funding

FFI believes it could utilize at least an additional \$27.6 million in funding over five years to work on projects including:

- **Replicating Haryana's model across India** – FFI would use additional funding to replicate Haryana's fortified wheat flour program model in other Indian states. It will need to create political will for fortification specifically at the state level, as the Indian central government already strongly supports food fortification efforts.
- **Scaling up rice fortification in West Africa** – FFI would use additional funding to scale up rice fortification in the 12 West African nations it identified as priorities, with the goal of reaching 146 million people. In addition, FFI hopes that a significant scale-up of rice fortification in West Africa would lead to an increase in capacity for fortified rice production in rice-exporting countries, enabling those countries to then provide more fortified rice to local populations.
- **Building political will for fortification in China** – The Chinese population consumes significant amounts of rice and wheat (wheat consumption is particularly high in northern China). The country possesses a high capacity for cereal grain fortification, as its mills for rice and wheat have industrialized significantly over the past five years. However, FFI believes that any effort to successfully promote food fortification in China would require a large funding commitment. Its plan would be to place a team in China that would garner political will from officials at the central government. After achieving sufficient political will, FFI would provide technical assistance to both provincial and national governments to scale up rice and wheat flour fortification programs. FFI estimates the likelihood of success for its fortification plan in China at 60% or greater.

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