

Smarter Futures Project Annual Narrative Report January 2020



Executive Summary

The Smarter Futures grant, received from the Dutch Government and administered through the Global Alliance for Improved Nutrition (GAIN) to the International Federation of Spina Bifida and Hydrocephalus (IF), became effective as of March 1, 2018. The overall objective of this grant is to improve the reach, coverage, and adequacy of fortified grains throughout the African continent in order to improve the nutritional status of target populations. To this end, the Smarter Futures grant consists of a broad range of activities built on rigorous data analyses that identify areas most in need, areas where the fortification of industrially milled grains can have the greatest impact, and key challenge areas for programs already in progress but faltering. Through the grant's targeted efforts and unique partnerships, FFI, as the implementing partner, aims to continue and / or begin providing direct assistance to 12 countries over the next one year. These countries include (Angola, Algeria, Botswana, Egypt, Ethiopia, Malawi, Morocco, Mozambique, Nigeria, South Africa, Uganda, and Zimbabwe). In addition to direct technical assistance, areas of focus in this grant include providing online fortification trainings, incorporating fortification trainings into milling schools across Africa, improving how compliance information is collected and acted upon, and convening regional implementing partners and government to ensure efforts are complementary, effectively targeted, and non-duplicative.

Key activities undertaken in the last one year include:

- Conducted two FortifyMIS trainings in Mozambique, including an extensive two-month training for GAIN-Mozambique staff, and one FortifyMIS training in Uganda.
- Conducted follow-up evaluations for the SADC regional meeting that took place in October 2018 and two Ethiopia trainings that took place in March and May 2019. The evaluations included a systematic follow-up on the usage of the tools taught in the trainings 6-12 months post-event, the progress made towards institutionalization, and commitments made by institutions.
- Completed a comprehensive situation assessment in Egypt and drafted a Partner Agreement with the Government.
- Finalized a concept note and agenda and began planning for an Africa-wide Monitoring 'Challenge' Workshop to address issues of non-compliance to take place in May 2020.
- Moved FFI's *Introduction to Micronutrients and Fortification Training* to an online platform, Google Classroom, for more efficient and effective scaling.
- Began and / or completed training 16 participants in the *Introduction to Micronutrients and Fortification Training* course.

- Offered two Kansas State University wheat flour monitoring courses, one in June and the other in October. Thirty-five (35) students were enrolled in the sessions.
- Participated in a Cost-Benefit Analysis (CBA) workshop for wheat flour and cooking oil with GAIN in Ethiopia as a means of advocating for national mandatory fortification.
- Identified next steps for technical support after discussions with government in Angola, Mozambique, Namibia, Zimbabwe, and South Africa.
- Completed the Pull Strategy in Malawi and Uganda and identified an effective means of alternatively ensuring fortification program performance.
- Supported WFP rice fortification efforts in The Gambia.
- Convened a Partner Coordination Meeting on the Scale-up of Rice Fortification in Africa and identified key next steps to bring this strategy to fruition.

Top achievement during this reporting period:

FortifyMIS Trainings in Mozambique. At the request of the Ministry of Industry and Trade, FFI with support from GAIN-Mozambique, led two trainings in Maputo between July and October 2019 on use of the FortifyMIS. These trainings included an in-classroom and in-field training for approximately 20 participants including individuals from INAE (Inspeccao das Actividades Economicas) (external producer inspectors), Municipality (external market inspections), ProConsumers (consumer-based market inspectors), Customs Officers, national laboratory staff, and fortified food producers.

As a result of these trainings, the Ministry of Industry and Trade is interested in pursuing a larger rollout of the FortifyMIS nationally in order to improve regulatory monitoring practices and ensure national compliance data is collected regularly and acted upon. The government has also requested support from FFI to strengthen the country's overall monitoring framework with a specific focus on import inspections.

Re-starting Fortification in Egypt. Following an initial trip in August and a follow-up trip in December 2019, a Partner Agreement was developed between FFI and the Ministry of Supply and Internal Trade (MoSIT) outlining key roles and responsibilities required to re-start Egypt's national fortification program (both within the national subsidy program and among open market flour producers). Following a meeting held with Minister Dr. Aly Moselhi, FFI obtained the full backing from the Minister and the Ministry for this initiative. A situation assessment and program budget was presented to key stakeholders and immediate next steps identified for Q1-Q3 2020 including: formal signing of the Partner Agreement by the Minister, a comprehensive mill mapping and monitoring framework mapping exercise, the training of mill staff as necessary based on the findings of the mill mapping exercise, the training of regulatory monitoring staff as necessary based on findings from the monitoring framework mapping exercise, and engagement with Egypt's new Food Safety Authority regarding the formal inclusion of fortification into national food safety measures.

Completion of the Pull Strategy. In November 2019, Pull Strategies in Malawi and Uganda were completed. The Pull Strategy is an innovative initiative that engages consumer and parents groups of children with disabilities to support improved fortification program

performance. It includes three key activities: 1) the completion of a national situation analysis and capacity building of consumer and parent groups to monitor fortified foods; 2) market monitoring by consumer and parents groups to detect fraud and / or fortified food products on the market that do not meet national standards; and 3) engagement with the media to praise brands / producers demonstrating good performance and identify next steps with government regulators in the face of brands / producers demonstrating poor performance.

Based on results from Uganda following the implementation of the Pull Strategy activities, rates of cooking oil and wheat flour on the market meeting national standard increased as compared to before the Pull Strategy activities were implemented. (However, this was not the case for maize flour, likely due to the high rate of small-scale producers of maize flour in Uganda— the regulation in Uganda mandates fortification among industries with a capacity of 20MT per day and above to fortify while those below this capacity do so voluntarily or not at all. Interestingly, even maize flour brands produced by larger mills were found not to be fortified due to, what producers reported as, price competition from the small-mill maize flour brands. However, this issue is also likely rooted in a lack of external monitoring and enforcement). See results in the table below. Likely reasons for improved rates among vegetable oil and wheat flour samples include: 1) the dissemination of market survey results illustrating brands that met and / or did not meet national standards and engagement with producers in a private setting on these findings, and 2) humanizing the potential impact that food producers could have on improving rates of disability in Uganda by facilitating face-to-face meetings and visits between producers and children and parents affected by neural tube defects.

Fortified Food Vehicle	Pull-1 Results 2018 (% compliant)	Pull-2 Results 2019 (% compliant)
Vegetable oil (vit A)	55%	97.4%
Wheat flour (iron)	70%	93.6%
Maize flour (iron)	10%	6.9%

In Malawi, FFI, along with parent groups of children with disabilities and the Consumer Association of Malawi (CAMA), conducted a media advocacy campaign targeting food producers, media agencies and government officials from Nov 10-15. As a result of the campaign, food producers committed to improve their compliance to national fortification standards and the media shared information on food fortification via radio stations, TV stations and local print media. However, the Malawi Pull project is not complete with a few critical next steps required to see the strategy through. These activities are outlined on page 17 of the [final report](#). Preliminary market surveillance survey results, which were collected by the Government of Malawi and not civil society groups, did not show any improvement in compliance following the Pull Strategy activities.

Challenges faced / variances with what was planned

All activities are on track to be completed as outlined in the original work plan with the exception of technical assistance to Algeria and Morocco, the regional workshop, and

FortifyMIS rollout. Engagement in Algeria is on hold due to the current political situation and engagement in Morocco is on hold due to the fact that FFI's North Africa Technical Advisor, who is currently leading efforts in Egypt, will also lead in Morocco and we do not want to distract from the momentum we have gained in Egypt at this time. The regional workshop slated for 2019 will take place in May 2020 due to logistical considerations. Other notably variances are in relation to the FortifyMIS rollout, which were outlined in the 2019 report indicating a need to “nail it, then scale it” before any further countries are engagement in adopting and adapting the MIS at a national level.

Main focus areas for 2020:

- Providing direct technical assistance to Angola, Botswana, Namibia, Mauritius, Mozambique, Zimbabwe, and South Africa
- Signing a Partner Agreement with the Ministry of Supply and Internal Trade in Egypt and completion of key next steps
- Completing a regional Monitoring ‘Challenge’ Workshop that identifies realist country-specific plans for collecting compliance information given existing human and financial resources
- Proving the viability (or not) of the MIS in Mozambique and Uganda and generating a revised point of view on key next steps globally
- Engagement with partners on a regional West Africa rice fortification strategy that includes standards creation and importer engagement

The activities outlined below provide a summary of progress made to date and proposed plans on work plan *objectives slated for 2019 and 2020*. Activities reported as complete in the 2019 report or activities slated for 2021 are not included in detail in this update. The Smarter Futures work plan can be found [here](#) for reference.

Activity Summary

Section 1: Regional and Country-Specific Trainings

1.1 Organize regional Southern Africa Development Community (SADC) Technical Assistance Workshop

Proposed timeline: Q3 and Q4 2018

Actual timeline: Oct 2018

Status: **Completed**

Output: Training provided to 11-14 SADC countries to address common challenges and country-specific needs.

Outcome: Change in knowledge / capacity per the pre-post assessments; champions identified and developed.

1.2 Organize two regional technical assistance workshops to be informed by the Africa Strategy Refresh.

Proposed timeline: Q3 and Q4 2019

Actual timeline: Q2 2020 (one comprehensive workshop will be held in lieu of two smaller ones)

Status: [In progress](#)

Original Output: Training provided to 5-8 regional countries to address common challenges and country-specific needs.

Original Outcome: Change in knowledge / capacity per the pre-post assessments; champions identified and developed

A Challenge Workshop entitled: *Identifying Innovative and Effective Means of Strengthening Fortification Program Monitoring Using Existing National Resources* will be held from May 5-8 in Johannesburg, South Africa. The draft workshop concept note and agenda can be found [here](#).

Workshop Objectives

1. Provide participants with an opportunity to consult and share good practices on how their specific programs currently determine (or not) fortification program compliance (in practice vs. on paper). This should also include practices and challenges that lead to low compliance;
2. Provide participants and organizers with a unique opportunity to brainstorm on how the above approaches might need to change and the identification of practical solutions to determining program compliance based on what has worked and what hasn't worked and based on available national resources in each country;
3. Share new streamlined approaches to regulatory monitoring and how to operationalize these approaches at a country level;
4. Articulate a plan for participating countries to adopt in order to obtain, report out on, and / or act upon compliance information that takes into account current national constraints (both human and financial).

Expected Outcome

1. Identification of 3 or more country-identified practical solutions for obtaining, reporting out, and / or acting upon program compliance information that take into account current human and financial resources (emphasis will be placed on what countries can afford without additional support);
2. Documentation of good practice monitoring systems from selected countries, if applicable;
3. Articulation of detailed country-specific plans for each country participating that operationalize the identified "winning" practical solutions and / or the solution the country has chosen; and
4. Partner agency / country team pairing that will ensure follow-up guidance is provided to each country on the articulated country-specific plans.

Ten countries have been chosen to participate in this workshop based on recent data indicating they are fortifying 75% or more of your wheat or maize flour and/or have identified improvements in your fortification regulatory monitoring system as a priority. Participants from Cameroon, Cote d'Ivoire, Ghana, Kenya, Mozambique, Nigeria, Senegal, South Africa, Tanzania, and Uganda are expected to participate.

FFI is seeking additional funding support (~\$20K) for this workshop from partners.

1.3 FortifyMIS support provided to three countries

Proposed timeline: Q2-Q4 2018

Actual timeline: Q2 2018-Q4 2020

Status: [In progress](#)

Output: FortifyMIS users in each country trained on use of the MIS; MIS is accepted and adapted.

Outcome: MIS used by intended users in all three countries to gather and report nationally on fortification compliance information (confirmed by indicators of use); change in monitoring capacity per pre-post training assessment.

Two FortifyMIS training were conducted in Mozambique as outlined above on page 2-3 and one conducted in Uganda. As a result of these trainings in Mozambique, the Ministry of Industry and Trade is interested in pursuing a larger rollout of the FortifyMIS nationally in order to improve regulatory monitoring practices and ensure national compliance data is collected regularly and acted upon. In Uganda, after many months of discussions with UNBS and the MoH around how to link the MIS with existing national databases used by producers and lab staff, it was determined that they would prefer to use the FortifyMIS to collect market inspection data only.

Next Steps in Mozambique:

- Pilot MIS use in Maputo Province before rollout to other provinces
- Agree with gov't on a timeline and work plan for FFI TA to strengthen overall fortification monitoring framework in Mozambique

The following workplan is proposed by FFI as immediate next steps for such a rollout in Mozambique:

- It is suggested that a FortifyMIS rollout happen in a phased approach using a Training of Trainers (ToT) format. The phased approach should begin with INAE inspectors, Municipality inspectors, ProConsumers, and national laboratory staff in the Maputo province as a pilot. Before border inspectors are trained, further support should be provided to them on how fortification inspections and assessments are conducted. FFI is able to provide this support following the MIS Maputo province pilot along with general strengthening of Mozambique's fortification monitoring framework.
- One individual from each agency being trained (i.e. INAE, Municipality, ProConsumers, and national lab) should be identified as the FortifyMIS point person for that agency. This point person should be consistently available for FortifyMIS

trainings, rollouts tasks, and coordination and should not change. This individual will be responsible for participating in MoH/GAIN-Mozambique check-ins which will take place once a week for the first month in order to gauge the progress of FortifyMIS use and address any issues or challenges following rollout. This person will also be the point person for any MIS troubleshooting issues that may arise. Ideally, this group of point persons should be drawn from a core team within CONFAM under the leadership of the Ministry of Industry and Trade. This group will also need to take part in the ToT to learn the system.

- A subset of participants from each agency being trained should be chosen from the participants already trained on the FortifyMIS in the July and / or October trainings. These individuals should be those who have demonstrated a strong understanding and ability to use the FortifyMIS, should have adequate teaching / training abilities, be motivated to train others, and should be given permission by their superiors to be ToT trainers for the agency ensuring they have the bandwidth to commit to this. These individuals will be responsible for conducting subsequent trainings (ToTs) for their agency staff on the FortifyMIS. GAIN-Mozambique and Ministry of Industry and Trade should be responsible for identifying the ToT trainers based on past performance.

Next Steps in Uganda:

- Sync the MIS market inspection component with the needs of Uganda's data and decision-making at the market level
- Train relevant market inspectors first in the Kampala region before seeking government approval for a larger roll-out nationally

1.5 Regional partners trained in the use of FortifyMIS so their staff are knowledgeable on what is available and can present to government counterparts.

Proposed timeline: Q3 2018 – Q1 2019

Actual timeline: Q3 2018 – Q4 2020

Status: [In progress](#)

Output: Staff from three regional partner organizations are trained on use of the MIS so they have a deep understanding of the MIS and are able to make it available at gov't levels.

Outcome: Regional partners train government staff on use and adoption of the MIS in three different countries.

In November 2019, a team of GAIN-Mozambique staff were trained over a two month period on FortifyMIS use and trouble-shooting in order to ensure on-the-ground support as needs required. Although a team of government MoH staff were also identified for this training, their attendance at training sessions was limited for most of the two-months. This is a challenge that is currently being discussed with MoH leadership since having government support staff on the ground is also required for this system to be effective and sustainable. A similar model will be used in Uganda.

1.6 Participation in relevant regional fortification meetings to share good practices.

Proposed timeline: Q4 2018 onward
Actual timeline: Q4 2018 onward
Status: [In progress](#)

Output: Presentations made at regional meetings.
Outcome: New regional partnerships are established.

FFI participated in the Southern African Development Cooperation (SADC) Ministers Conference from Nov 5-6 in Dar-es-Salaam, Tanzania. In this meeting, FFI made a presentation on behalf of SADC that included an overview of the SADC regional guidelines for fortification. Following the presentation, the health ministers approved and directed member states to adapt and adopt the guidelines, which included regional standards and a regional framework for monitoring and evaluating fortification programs.

1.7 Participation in IAOM meeting in 2020 venue TBD.

Proposed timeline: Q4 2020
Actual timeline: TBD
Status: **Not completed but on track**

Output: Acceptance is obtained to present at meeting.
Outcome: Presentation at plenary session occurs and new private-sector partnerships solidified.

Next steps: Identify when and where the next IAOM meeting is and ensure FFI has a presentation slot.

1.9 Cost Benefit Analysis (CBA) training in two countries.

Proposed timeline: Q3 and Q4 2019
Actual timeline: Q4 2019 – Q4 2020
Status: [In progress](#)

Output: Based on the findings of activity 3.1, two countries are identified and trained on the new CBA tool.
Outcome: Country teams use the CBA tool to advocate for fortification at a country level.

FFI took part in a GAIN-led CBA awareness exercise in Ethiopia in 2019. Twenty-five (25) participants from government, research institutions, and external partners took part in the Addis-based event. The objective of the gathering was to raise awareness in Ethiopia as to the usefulness of this tool for advocacy purposes and to test the revised CBA for cooking oil. Following the event, key gaps in the new cooking oil CBA tool were identified as well as the challenges that exist in obtaining some of the required country-specific data needed to generate outputs and conclusions from the tool.

Next steps: In Ethiopia specifically, the CBA tool design team will review the cooking oil tool and revise as necessary. A hired GAIN consultant will collect missing country-specific data

and re-run the analysis so outputs can be used for awareness raising. FFI, specifically, will identify 1-2 countries in 2020 to use the wheat flour CBA tool in as means of garnering further support for national fortification programing. Countries of interest currently include Mauritius and potentially Namibia.

Section 2: Evaluation of Regional Technical Workshops

2.2 Evaluation conducted of SADC meeting and country-specific follow-up provided to SADC countries following the workshop.

Proposed timeline: Q3 2018 – Q1 2019

Actual timeline: Q3 2018 – Q1 2019

Status: Complete

Output: Evaluation is conducted and priority follow-up countries are identified based on capacity gaps.

Outcome: Change in knowledge/capacity per the pre-post assessments to ensure meeting objectives were met; discussions begun with priority countries to engage in country-specific technical assistance as needed in the coming months.

Both the pre- and post-assessments and the 12-month follow-up evaluation for the 2018 SADC workshop have been completed. The full pre- and post-assessment report can be found [here](#), which measures change in knowledge before and after the workshop. In terms of the 12-month follow-up evaluation, of the 36 country delegation participants that received the evaluation via e-mail from FFI, only [8 responses](#) were received after three attempts to obtain feedback. This brings to light the need for another method, outside of e-mail, to obtain follow-up evaluation data after a workshop (a similar challenge was faced following the Ethiopia ToT training). FFI will consider conducting phone interviews for the next workshop in order to better understand how knowledge is used and applied in day-to-day work environments.

Section 3. In-Country Capacity Building

3.1 Strategy refresh for all of Africa

Proposed timeline: Q2 2018 – Q1 2019

Actual timeline: Q2 2018 – Q1 2019

Status: Complete

Output: Landscape analysis, industry analysis, partner mapping, and current state of fortification are completed for each country.

Outcome: Priority countries and regional activities are identified and inform future work plans.

Although the Africa Strategy Refresh was completed in 2019 and shared with the Smarter Futures Steering Committee meeting in February 2019 as reported in the last update, this analysis was revised in September 2019 taking into consideration additional country-specific information that was obtained from partners. This revised analysis was shared with all

Steering Committee Team members in October 2019 for use in their respective organizational fortification strategies. The revised analysis also informed the countries that are being invited to the 2020 Monitoring Challenge Workshop to be held in Johannesburg in May. A summary of the final categorized countries can be seen below and a copy of the revised presentation can be found [here](#).

Strategic Priority Categories

<p>Monitoring & Support for Adequacy Over 75% of industrially-milled grain available in the country is fortified. Main role is to ensure monitoring structures are in place and effective.</p>
<p>Priority 1 Confident country will move to 75% in 2020-2022. High health impact and ease of implementation score.</p>
<p>Priority 2 Industrial milling processes and political environment make fortification viable (moderate ease of implementation score). Burden of disease can be addressed by fortification (moderate health impact score). Current status indicates additional focused efforts and support are needed to move to 75%.</p>
<p>Priority 3 Fortification has not been a priority but there is interest in making it one. Potential for health impact.</p>
<p>Priority 4 The political environment may not favor fortification (low ease of implementation score) and / or consumption of cereal grain needs further understanding.</p>
<p>Gray Fortification of grain likely to have very limited health impact (low health impact score); or no data.</p>

Wheat Flour Summary

Monitor & Support	Priority 1	Priority 2	Priority 3	Priority 4	Gray
Benin, Cameroon, Cape Verde, Congo, Cote d'Ivoire, Djibouti, Eswatini, Gambia, Ghana, Guinea, Kenya, Lesotho, Liberia, Mali, Namibia, Niger, Nigeria, Sierra Leone, Senegal, Tanzania, Togo, Uganda	Egypt, Gabon, Morocco, Mozambique, Sao Tome & Principe, Sierra Leone, South Africa, Tunisia	Algeria, Angola, Botswana, Burkina Faso, Congo Rep, Liberia, Madagascar, Mauritius, Namibia, Rwanda, Sudan, Zimbabwe	DRC, Equatorial Guinea, Eswatini, Ethiopia, Lesotho, Seychelles	Burundi, Comoros	Central African Republic, Chad, Libya, Somalia, Guinea-Bissau, South Sudan



Maize Flour Summary

Monitor & Support	Priority 1	Priority 2	Priority 3	Priority 4	Gray
Cote d'Ivoire, Lesotho, Nigeria, South Africa	Kenya	Namibia, Tanzania, Uganda, Zimbabwe	Benin, Burkina Faso, Botswana, Cameroon, Cape Verde, Eswatini, Gabon, Mozambique, Rwanda, Togo	Burundi	Algeria, Angola, Central African Republic, Chad, Comoros, Congo, Djibouti, DRC, Egypt, Equatorial Guinea, Eritrea, Ethiopia, Gambia, Ghana, Guinea, Guinea-Bissau, Liberia, Libya, Madagascar, Mali, Malawi, Mauritania, Mauritius, Morocco, Niger, Sao Tome & Principe, Senegal, Seychelles, Sierra Leone, Somalia, South Sudan, Sudan, Tunisia



Rice Summary

Monitor & Support	Priority 1	Priority 2	Priority 3	Priority 4	Gray
N/A	Benin, Cabo Verde, Comoros, Cote d'Ivoire, Djibouti, Gabon, Gambia, Ghana, Guinea-Bissau, Liberia, Nigeria, Senegal		Egypt, Mauritania, Mauritius, Madagascar	Guinea, Mali, Sierra Leone	Algeria, Angola, Botswana, Burkina Faso, Burundi, Central African Republic, Chad, Congo Rep., DRC, Equatorial Guinea, Eritrea, Eswatini, Ethiopia, Kenya, Lesotho, Libya, Malawi, Morocco, Mozambique, Namibia, Niger, Rwanda, Seychelles, Somalia, South Africa, South Sudan, Sudan, Tanzania, Togo, Tunisia, Uganda, Zambia, Zimbabwe

3.2 Technical assistance to Egypt

Proposed timeline: Q3 2018 – Q1 2019

Actual timeline: Q2 2019- Q1 2021

Status: **Extended** / **In progress**

Output: Discussions begun with government regarding how to address political barriers and re-start fortification; areas of TA identified and provided.

Outcome: Fortification is re-started.

As already mentioned above, following an initial trip in August and a follow-up trip in December 2019, a Partner Agreement was developed between FFI and the Ministry of Supply and Internal Trade (MoSIT) outlining key roles and responsibilities required to re-start Egypt's national fortification program (both within the national subsidy program and among open market flour producers). Following a meeting held with the Minister of Supply and Internal Trade, Dr. Aly Moselhi, FFI obtained the full backing from the Minister and the Ministry for this initiative. A [situation assessment and program budget](#), still in draft form, will be presented to key stakeholders in February 2020 and immediate next steps identified for Q1 – Q2 2020 as outlined below.

Next Steps: The formal signing of the Partner Agreement by the Minister and a clear indication of what is required from a legal perspective to make fortification (both through the subsidy program and the open market) mandatory; a comprehensive mill mapping and monitoring framework mapping exercise; the training of mill staff as necessary based on the findings of the mill mapping exercise; the training of regulatory monitoring staff as necessary based on findings from the monitoring framework mapping exercise; and engagement with Egypt's new Food Safety Authority regarding the formal inclusion of fortification into national food safety measures.

Additional funding is also being sought for the activities required in Egypt over the next one year.

3.3 Technical assistance to Morocco

Proposed timeline: Q4 2018 – Q1 2019

Actual timeline: Q4 2020 – Q4 2021

Status: **On hold**

Output: Food inspectors and millers trained on regulatory monitoring and FortifyMIS. Other tools may also be considered.

Outcome: Food producers and inspectors collect sufficient monitoring data on a periodic basis; information is used to inform and improve the state of compliance.

Engagement in Morocco is on hold while we focus our North Africa Technical Advisor on efforts currently underway in Egypt. We anticipate beginning work in Morocco in Q1 2021.

3.4 Technical assistance to Angola

Proposed timeline: Q3 and Q4 2019

Actual timeline: Q1 – Q4 2020

Status: **Extended / In progress**

Output: Begin discussions with government around the design of a national fortification program. Identify priority areas of need and provide targeted TA.

Outcome: TA results in measureable change in the specific area of support. This may include: initiation of legislation process; standards development; inspector training; and / or advocacy training.

Following discussions with the Government of Angola and WFP in 2019, FFI formally offered technical assistance to begin a national fortification program in order to address the country's high rates of micronutrient deficiencies. Currently, WFP has a MoU with the Government of Angola to support the design and implementation of large-scale fortification, however, they do not have the funds to operationalize the MoU. In November, WFP completed a mission trip to assess the specific needs of the country and to propose a required budget, which will be pitched to the World Bank, the European Union, as well as others.

Next steps: Once FFI receives the outcome of the WFP November mission trip, WFP and FFI will work together to put a plan in place, in collaboration with the government, that will include a comprehensive support structure and technical assistance to key stakeholders in-country for the rollout of a national fortification program.

3.5 Technical assistance to Algeria

Proposed timeline: Q4 2018 – Q1 2019

Actual timeline: TBD

Status: **Likely delayed until Q4 2020**

Output: Begin discussions with government around the design of a national fortification program. Identify priority areas of need and provide targeted TA.

Outcome: TA results in measureable change in the specific area of support. This may include: initiation of legislation process; standards development; inspector training; and / or advocacy training.

This activity is on hold due to the current political situation.

Next steps: Complete a desk review of the fortification situation in Algeria; carefully monitor the security situation.

3.6 Technical assistance to Ethiopia

Proposed timeline: Q3 and Q4 2019

Actual timeline: Q1 2019

Status: **Complete**

Outputs: TA provided around QA/QC for government food inspectors and for domestic food producers including appropriate testing protocols.

Outcomes: Food producers and inspectors collect sufficient monitoring data on a periodic basis and conduct appropriate testing; information is used to inform and improve the state of compliance.

At the request of GAIN-Ethiopia, FFI led two Training of Trainer (ToT) workshops in March and May 2019 for wheat flour and cooking oil producers and regulatory inspectors. In November 2019, GAIN-Ethiopia used trainees from the original ToT to train other wheat flour and cooking oil producers and regulatory inspectors. All 23 participants of the Ethiopia ToT workshops received a post-workshop assessment to measure knowledge gained during the training as well as a 6-month follow-up evaluation to assess how trainees used the knowledge obtained in the workshop in their day-to-day work. The results of the pre / post workshop assessment can be found [here](#) for the wheat flour training and [here](#) for the cooking oil training. The final report for the wheat flour training can be found [here](#) and the final report for the cooking oil training can be found [here](#). To date, only six follow-up evaluations have been received for both the wheat flour and cooking oil trainings necessitating an alternative means of administering follow-up evaluations for FFI trainings.

Finally, also in support of Ethiopia's fortification program, in May, FFI composed a response for Ethiopian colleagues on evidence that flour fortification with folic acid reduces NTDs.

Next steps: Support partners and government as necessary on the finalization of standards and mandatory legislation (e.g. on call; FFI has no further specific plans in Ethiopia due to role of multiple other partners in-country).

3.7 Targeted technical assistance provided to two SADC countries as identified in activity 2.1 following the SADC workshop.

Proposed timeline: Q1 – Q3 2019

Actual timeline: Q1 2019 – Q4 2020

Status: **Extended** / **In progress**

Outputs: TA is provided, which may include feasibility and reach, QA/QC, advocacy, or other needs as identified by the government, SF, and partners.

Outcomes: TA results in measureable change in the specific area of support.

Following initial discussions with the SADC Secretariat Partner Coalition team on the outcomes and next steps of the SADC meeting, FFI will serve as lead agency in support to *South Africa, Botswana, Zimbabwe, Namibia, Angola, and Mauritius*. Funding under this Smarter Futures grant will include support to *South Africa, Angola* (already outlined above) and *Zimbabwe* only. Support for Botswana, Namibia, and Mauritius will be funded from other sources, however, an update is still provided below.

South Africa: Per the request of the National Department of Health, FFI's objective in South Africa is to strengthen the national fortification monitoring framework. Throughout 2019 this included extensive input throughout the drafting of South Africa's Monitoring Implementation Guidelines. In 2020, it will include technical assistance in the development of tools and training to operationalize the Guidelines. However, based on in-depth discussions in 2019 with key stakeholders involved in South Africa's fortification program, FFI's recommendation to the Department of Health is to explore alternative means of determining fortification program compliance. This is based on two findings: the extensive amount of production and premix data that is already collected in South Africa (largely via the SAGIS

system and the Millers Association) *and* the limited bandwidth and mandate of Environmental Health inspectors in the country to actually collect fortification compliance information. It was determined that training these inspectors would be for naught given the reality of the situation on the ground and, instead, the country should use data that is already being collected to infer compliance.

South Africa Next Steps: The Department of Health will discuss with key stakeholders what the best approach might be to obtain compliance information based on already collected data. Based on the decision, FFI will provide required technical assistance in addition to advocating for the finalization of the Monitoring Implementation Guidelines and promulgation of the new fortification standards, which now include cake flour.

Zimbabwe: Per the request of the Ministry of Health and Child Care (MoHCC) and UNICEF-Zimbabwe, FFI's objective is to guide the country in the development of a national fortification strategy with a particular focus on the drafting of monitoring and communication plans within the strategy. Throughout this process, FFI will also support the country as necessary to ensure adoption of the drafted standards and more effective engagement with the private sector.

In April 2019, FFI completed a mission trip to Zimbabwe which uncovered inherent regulatory monitoring challenges. In our discussions with government and UNICEF, it was determined that FFI's support could best be leveraged by providing oversight to a consultant that UNICEF will hire to draft a National Fortification Strategy. FFI agreed and will be engaging on a weekly basis with the consultant once hired (this hire process has been delayed for many months due to approvals required at the government level). Additionally, FFI agreed to provide salary for one year for a government-based consultant who will shadow the strategy consultant. Following the completion of the strategy, this government consultant will then be placed permanently within the MoHCC and be responsible for all national fortification activities.

Zimbabwe Next Steps: Trip to meet hired consultant and agreement on data collection and writing plan; signing of the drafted Partner Agreement between FFI, UNICEF-Zimbabwe, and MoHCC; weekly FFI/consultant calls throughout the drafting and validation process; support standards finalization and adoption, and improved miller engagement (Millers Association and forex challenges).

Botswana: Botswana has shown interest to move forward with a fortification program but wants to generate national-level data that shows need and provides information on best foods and nutrients to target. As a result, FFI's objective in Botswana is to assist in the generation of data and subsequent policy and regulatory support based on data findings. Specifically, the government has requested support in the analysis of national consumption data that has already been collected, however, sees a conflict of interest in FFI completing the analysis in addition to providing primary technical assistance support. Therefore, a decision was made to pursue a cross-university collaboration. The Government of Botswana will contact the University of Botswana and the University of Agriculture Sciences and National Resources in order to determine their capacity to analyze the collected data with support from Emory

University. Jointly, the government and SADC will liaison with FAO to fund such work as they have money earmarked for such an activity. Following data analysis and interpretation, FFI will support the creation of food control regulations and a national fortification policy taking into account the study findings.

Botswana Next Steps: Identification of an agency to provide data analysis support (due to capacity challenges within the Nutrition Division of the MoH, this activity will likely be delayed until the middle of 2020); determine how Emory University can or cannot support; determine best vehicles to target based on results of the consumption data; work with government to present the case and proposed next steps for mandating and designing a program; provide technical support in the drafting of policy and regulatory structures; support to SADC on the drafting and dissemination of regional standards that Botswana can use to guide their program.

Namibia: Similar to Botswana, Namibia is interested in pursuing a fortification program after obtaining and reviewing national-level consumption and deficiency data. As a result, FFI's objective in Namibia is to assist in the generation of data and subsequent policy and regulatory support based on data findings. FAO and UNICEF will complete secondary analysis of available data on child food consumption from a recent HIES survey and the University of Namibia will conduct a large-scale household survey with a micronutrient module in July 2020. Between Q2 and Q3 2020, UNICEF and IGN will lead a situation analysis and fortification strategy development process and FFI will complete a monitoring mapping exercise that will inform an agreed upon framework for food inspections that can guide national fortification regulations.

Namibia Next Steps: FFI will lead a monitoring mapping exercise in April / May 2020 and support the development of the food inspections framework alongside IGN's strategy work. Following the suggested monitoring framework, FFI will support creation of monitoring systems, as necessary, and conduct inspector trainings.

Mauritius: Mauritius reached out to FFI in early 2019 seeking assistance in the design and implementation of a national wheat flour fortification program after the government approved a fortification proposal and budget for their 2019/2020 fiscal year. As a result, FFI drafted a costed workplan and submitted it to the MoH's Chief Nutritionist for internal government approval.

Mauritius Next Steps: Following national protocol, the MoH has submitted a request to SADC for FFI's formal support in the design and implementation of their fortification program. FFI has made SADC aware of this request and SADC is eager to encourage the collaboration between FFI and the Government of Mauritius once they receive the letter of request.

3.8 Conduct country-specific trainings for civil society organizations to create demand for fortified products. This will also be informed by 2.1: identified countries struggling with compliance.

Proposed timeline: Q1 2019 – Q4 2021

Actual timeline: Q1 2019 – Q4 2021

Status: Complete / In progress

Outputs: Identify countries that would benefit the most from this; begin discussions with government regarding how to proceed; civil society group trainings occur; civil society groups conduct advocacy for fortification at a national level.

Outcomes: Civil society group advocacy efforts result in increased demand for fortified products as measured by a pre-post assessment.

This activity includes two components:

1. *Pull Project Lessons and Opportunities.* Understand lessons learned and experiences from the Pull Project conducted in Malawi and Uganda to identify opportunities for future Pull Projects in other countries. Funding outside of the Smarter Future's grant will be sought for building on the Malawi and Uganda experience to ensure required next steps are taken that will lead to improved rates of compliance.
2. *Engagement with and Training of SP&H Associations.* Engagement with country-specific spina bifida and hydrocephalus associations in order to build their capacity and train them on how to effectively engage and participate in fortification discussions and efforts. Ultimately the goal is for civil society group advocacy efforts to result in increased demand for fortified products.

Pull Strategy in Malawi and Uganda. As mentioned above, the Pull Strategies in both Malawi and Uganda have been completed. Final reports for each can be found [here](#) for Malawi and [here](#) for Uganda. Additionally, FFI created a [Pull Strategy Tool Kit](#) to guide other countries interested in adopting such an approach.

The following are **key results achieved** from the Pull Project:

- a. Awareness was created for consumer groups and parent groups on the impact of folic acid fortification in preventing neural tube defects. The project demonstrated that consumers and the civil society have the right, the power, and the mandate to monitor the quality of products on the market. Therefore, their involvement in fortification monitoring at the market level is in line with this mandate and it is legal.
- b. The milling industry became conscious that consumer groups and other civil society organizations can play a role in monitoring compliance of their products in addition to government regulatory agencies.
- c. Basic knowledge and skills were conveyed to consumer and disability groups on commercial monitoring of fortified foods.
- d. In Uganda, the engagement of children and parents influenced by neural tube defects with millers provided an important humanizing component to their fortification efforts that helped drive improvement in rates of program performance before and after the Pull Strategy activities (see graph provided on page 4). A similar method was also used in Malawi, although, we do not yet know what the impact on program performance is based on this interaction.

Although much was accomplished, some short falls or challenges we encountered during the implementation which included:

- Few samples, industrial brands of fortified foods were collected and analyzed and the results could not be conclusively used to pin-down poorly fortifying industries.
- Limited number of vials were purchased for analysis of fortified foods.
- The private sector engagement was not implemented in Malawi because they viewed it as not appropriate at the moment. For Uganda, however, this was one of the strongest components.

Recommended Next Steps in Uganda:

1. Publish a praise list of brands that performed well in the media to encourage consumers to purchase from top-performing brands.
2. Report non-complaint brands to regulators for internal confirmation and enforcement of standard.
3. Strictly enforce fortification requirements for imported goods and encourage the government to notify identified importers about Ugandan import requirement.
4. Organize an in-person meeting between UCPA, SHAUL, and regulators before publishing the praise list of products/brands.
5. Encourage millers who produce both fortified and unfortified brands to develop a new approach to fortify all their maize flour brands.
6. Identify packaged maize brands/producers in the market and ensure they receive a capacity assessment and fortification follow-up.

Recommended Next Steps in Malawi:

Rather than implementing the complete Pull Strategy, advocacy groups in Malawi focused on the strategy's information sharing activities to influence key decision-makers towards improving program performance. As a result of their efforts, the Malawian Government promised to engage various stakeholders to increase enforcement of fortification, promote fortified food consumption, and ensure that people in rural areas are able to access fortified food at an affordable price.

The Malawi Pull Strategy is incomplete. FFI will seek funding to complete the additional activities suggested in the annex of the [final report](#) and further build the technical capacity of CAMA and PASHL to eventually undertake a market assessment of their own.

Overall Next Steps: Seek additional funding to expand upon the work done in Malawi and scale the approach to a sub-set of further interested countries (e.g. Cote d'Ivoire, Senegal, Tanzania, Zambia, Kenya).

Engagement with and Training of SB&H Associations. IF is still actively working with Spina Bifida and Hydrocephalus Associations in Uganda, Malawi, Ethiopia, Nigeria, and Sudan, and whilst maintaining this support, continues to actively seek further opportunities for similar engagement in other African countries where the organization has an active SB&H Association presence.

Activities include:

- a) Development of regular, short trainings with representatives of Spina Bifida Associations to increase their capacity to advocate for and monitor fortification efforts.
 - a. Online meetings with Uganda and Malawi as follow-up to the Pull Project
 - b. Missions to build capacity with member organizations in Uganda (January and October 2019), Kenya (January 2019) and Tanzania (July 2019 and November 2019). Missions to be planned to Malawi and Uganda in 2020.
 - c. Online meetings to start discussion in Nigeria and Ethiopia
 - d. Meetings and consultation with Dr. Aziza Mustafa Alnaeema, IF board member, and representatives of the Sudan Federal Spina Bifida Association on the planned fortification meeting for Q4 2019, which, due to civil unrest, has been postponed to 2020.
- b) A [country specific data base](#) of active knowledge management has been created, from the perspective of a NTD prevention and the role of a parent association with a focus on policy development and monitoring. Detailed country specific profiles have already been created for Ethiopia and Uganda (being regularly expanded in response to new information/developments/activity) and profiles for Malawi and Nigeria are currently in development. The database will continue to be expanded as more information is gained and further country profiles are added.
- c) Translations of folic acid/prevention awareness raising materials i.e. IF's *'Folic Acid – What Every Woman Needs to Know BEFORE Becoming Pregnant'*, with bespoke tailoring, ensuring use of culturally relevant images and highlighting relevant local sources of natural/fortified folate rich foods.
- d) Outreach in Ethiopia for NTD epidemic
 - a. Follow up activities related to a January 2018/April 2019 mission to Addis Ababa and Mekkele; follow-up with the Ethiopian member organization following the April 2019 meeting
 - b. Support for publications on NTD incidence, support for follow up at Mekkele, support for local political activity
 - c. Preparing for capacity building training for the leadership of the Ethiopian member organization slated for Q1 2020
- e) Direct technical support to the IF member organizations of technical resource persons at IF secretariat apart from Smarter Futures staff:
 - Martine Austin: consultant, Program Manager Global Prevention Initiative, to support members in development of advocacy strategy, awareness raising/health promotion activity/materials and follow-up with individual countries and development of country profiles.
 - Renée Jopp: staff member, IF Information Officer, to support members with country specific information on research, policy, publications
 - Until August 2019: Katalijne van Diest: programme development, reporting, fundraising
 - Until November 2019: Lieven Bauwens, to develop country specific advocacy capacity, political support, reporting. Lieven Bauwens moved into a new role at IF (from December 2019 onwards: President of the Board of IF). In this new role, he will engage closely with his successor.

Next Steps: Engage other SBH associations across Africa in country specific prevention clinics to be held monthly (combination of new and ‘follow- up’ development calls); building knowledge, confidence and capacity among SBH local associations and continuing to develop a progressive network of active, empowered and proficient associations.

3.9 Facilitation of a workshop in Mozambique entitled 'Surveillance and Monitoring of Fortification Programming: Opportunities, Tools and Constraints'

Proposed timeline: Q4 2018 – Q1 2019

Actual timeline: Q2 2019

Status: Complete

Output: Clarity is provided on the various tools and their intended application; clarity is gained on the status of FORTIMAS implementation in Mozambique and what may have hindered or helped the roll out.

Outcome: Mozambique decides way forward in terms of which tools are more appropriate for their needs (FORTIMAS, FortifyMIS, otherwise).

Upon government request, FortifyMIS trainings were held throughout 2019. Further scale-up will be pursued in 2020 as outlined under **activity 1.3**.

3.10 Assessment of TA needed for Mozambique.

Proposed timeline: Q4 2019 – Q1 2020

Actual timeline: Q2 – Q4 2019

Status: Extended / In progress

Output: Training is provided to the government of Mozambique on identified monitoring and / or surveillance tool.

Outcome: Mozambique effectively monitors and / or conducts surveillance on their national fortification program based on new tools acquired.

In addition to the government’s request to rollout the FortifyMIS in 2020, they have requested FFI’s support in the overall strengthening of their regulatory monitoring framework, particularly in relation to border point inspections.

Next Steps: FFI to map the current monitoring framework used in Mozambique and suggest means of streamlining and improving how data is obtained and acted upon. This will take place just after the next phase of FortifyMIS trainings.

Section 4: Global Resources for Effective Implementation

4.1 Assess all fortification trainings that currently exist and identify a single platform where these trainings can be made available in order to improve use and accessibility.

Proposed timeline: Q3 – Q4 2019

Actual timeline: Q3 – Q4 2019

Status: Complete

Output: A single, consolidated platform is identified and agreed upon by partners.

Outcome: Trainings are moved to this single platform.

As mentioned in the 2019 report, housing each of the trainings on one platform may prove to be a less than ideal solution. Instead, efforts are underway to make the trainings that FFI has access to more readily available to the general public. This has been done in two ways: 1) the *Introduction to Micronutrients and Fortification Training* has been moved to an online platform (Google Classroom), and 2) discussions are ongoing with Kansas State University around how to make the GAIN/FFI/KSU training modules more readily available to individuals that may want to take the course as opposed to groups of 10 or more.

4.2. Include one of the above-mentioned trainings in local university or milling school curriculum to provide the information to up and coming professionals.

Proposed timeline: Q2 – Q4 2019

Actual timeline: Q2 – Q4 2020

Status: Extended / In progress

Outcome: Trainings are included in at least two university curricula.

Output: Up and coming professionals use the fortification knowledge in future work as measured by a pre-post assessment.

Schools with milling curriculum:

Opportunities may and / or do exist in the following curriculums/schools:

- Nairobi's Milling School – This training took place in December 2019 and included training on flour quality and fortification. It was a joint effort between Buhler, BioAnalyt, and Technoserve. Material, supported by content from FFI, can be found [here](#) and [here](#). There are currently plans in place to continue to offer this training in the future.
- Morocco Milling School – FFI to review 2003 curriculum currently in use and update as necessary.
- Others listed on the IAOM website- <https://www.iaom.info/industry-resources/schools/>

Other schools outside of Africa to review include:

- Buhler, Switzerland
- North Dakota State University
- SIGI Canada
- China (three milling schools)
- Northern Crops Institute

Next Steps: FFI will prioritize following up and supporting the Morocco Milling School, as necessary, in 2020.

4.3 Include FORTIMAS indicators into the FortifyMIS platform (funding would be cost-shared with another partner).

Proposed timeline: Q4 2018 – Q2 2019

Actual timeline: Q2 – Q4 2019

Status: On hold

Output: Identify project scope, which indicators should be included, and what the user interface should look like. Secure partner support and funding.

Outcome: FORTIMAS and FortifyMIS are included on the same platform to ease usage and allow for improved data aggregation and comparisons

It still remains to be determined whether or not the FortifyMIS is a useful and scalable tool for use in country-specific settings. Until this is determined, it does not make sense to pursue the inclusion of FORTIMAS indicators into the FortifyMIS platform.

Next Steps: Identify what needs to be done in order to scale the MIS so that it can be used independently in country-specific contexts for the intended purposes; implement these findings; measure progress towards independent use.

Section 5: Organizational Learning

5.1 Develop a system for regular feedback and monitoring of SF workshops including a more systematic follow-up on the usage of the tools, the progress made towards institutionalization, and commitments made by institutions.

Proposed timeline: Q4 2018 – Q1 2019

Actual timeline: Q4 2018 – Q2 2020

Status: Extended / In progress

Outputs: Pre-post training tools developed and SF workshops are assessed regularly using pre-post training knowledge tests.

Outcomes: Results from the pre-post assessments are used to improve SF workshops.

Pre- and post-training tools have been developed for all Smarter Futures workshops. These include pre- and post-training assessments of knowledge retention and six to twelve month post-workshop evaluations to gauge how the information obtained in the workshop is used in day-to-day work life, how the knowledge may be institutionalization, and any institutional commitments in terms of fortification. The assessments and evaluations have been used to date following the Oct 2018 SADC meeting and the two Ethiopia Training of Trainers events held in March and May 2019. Although the pre / post assessments proved very effective, the 6-12 month follow-up evaluations had a poor return rate necessitating an alternative method (likely phone calls) of obtaining such information. Such an alternative method will be tried following the May 2020 Monitoring Challenge Workshop, although the same types of questions will be asked.

Next Steps: Identify alternative means of obtaining 6-12 month follow-up evaluation data for use upon completion of the May 2020 workshop.

Section 6: Develop and Expand Rice Fortification Strategies

6.1 Continue the West Africa rice fortification regional efforts to scale up rice fortification in Africa.

Proposed timeline: Q4 2018 – Q1 2021

Actual timeline: Q4 2018 – Q1 2021

Status: [In progress](#)

Outputs: Identify a specific dollar amount needed over a specific period of time to accomplish a core set of priority activities that will scale this effort; establish collaborative network of partners needed to achieve the core outcomes

Outcomes: Funding proposal is finalized; core set of activities identified as priorities amongst partners; timeline set for completing these activities.

In June 2019, FFI held a Partners Coordination Meeting to Scale-up Rice Fortification in West Africa with the goal of aligning on a harmonized approach to a West Africa rice fortification strategy that could reach 147 million people. Partners included WFP, HKI, NI, PATH, and GAIN. The final report can be found [here](#).

The results of the meeting included a three phased approach:

- **Phase 1:** Develop background data necessary for decision-making including cost modeling and sensitization activities with stakeholders. This includes country-specific situational analyses, costing models for the fortification of domestic rice and imported fortified rice and / or fortified rice kernels from countries of origin, and sensitization activities and awareness creations with decision-makers.
- **Phase 2:** Provide country-specific and regional body technical assistance and advocacy based on Phase 1 results.
- **Phase 3:** Support for national and / or regional legislation and standards for introduction of regional mandatory rice fortification.

In addition to the Partner Coordination meeting, FFI provided support to country-specific rice fortification efforts in West Africa. Using the landscape analysis from FFI/GAIN's Africa Supply Chain for rice fortification in 12 priority countries, WFP hired a local consultant to further explore the possibility and implications of rice fortification in The Gambia, Senegal and Cote d'Ivoire while PATH did the same in Ghana. As a result, WFP and PATH conducted advocacy and awareness workshops in each of these countries with FFI providing technical assistance via costing and implementation-specific presentations. Work plans for each country were developed and commitments were made to implement planned activities in these countries under phase 1.

Next Steps: Continue to seek funding for the proposed West Africa Rice Fortification Strategy and coordinate with efforts currently being undertaken by partners and governments in West Africa around rice fortification opportunities and requested national costing models.