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Food Aid Quality Review Phase II: Quarterly Technical Report No. 20

October 2020-December 2020

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Acronyms

AMS	Agricultural Marketing Service (USDA)
BHA	Bureau for Humanitarian Assistance (USAID)
FACET4SNF	Food Assistance Cost-Effectiveness Tool for Specialized Nutritious Foods
FAIR	Findable, Accessible, Interoperable, Reusable
FAQR	Food Aid Quality Review
FAS	Foreign Agricultural Service (USDA)
FBF	Fortified Blended Food
FY 2021	Fiscal Year 2021
M&E	Monitoring and Evaluation
PBS	Population-Based Survey
PI	Principal Investigator
REFINE	Research Engagement on Food Interventions for Nutritional Effectiveness
RUTF	Ready-to-Use Therapeutic Food
SNF	Specialized Nutritious Food
SNFP	Specialized Nutritious Food Product
UN	United Nations
USAID	United States Agency for International Development
USDA	United States Department of Agriculture

Food Aid Quality Review Phase III: Quarterly Technical Report Summary

I. Summary

Covering the first quarter of Fiscal Year 2021 (hereafter FY 2021), this report documents progress of the Food Aid Quality Review (FAQR) activity overall, as well as detailing outputs and impacts of Phase III work in particular.

Since its inception, the goal of FAQR has been to support the U.S. Government's humanitarian agenda by establishing evidence-based information systems, tools, and data-gathering and evidence-sharing platforms on food aid for nutrition. FAQR's activities and outputs will enable government-wide actions and public/private engagement around food aid to achieve greater cost-effectiveness for decades to come. For a detailed overview of all activities, see [Annex I](#).

This quarter, the team advanced objectives in the following ways:

- A. The [Commodity Incident Reporting Business Process Review](#) team completed a review of recent incidents, key information interviews, and a first draft of the final report for the workstream.
- B. The [Supply Chain Optimization](#) team started holding biweekly meetings with key partners from the United States Agency for International Development's Bureau for Humanitarian Assistance (USAID/BHA), continued to generate and test scenarios related to the global warehouse location model, and completed a first draft of the final report on the supply chain optimization demonstration model.
- C. The [Cost-Effectiveness](#) team officially launched the Food Assistance Cost-Effectiveness Tool for Specialized Nutritious Foods (FACET4SNF) during a well-attended webinar and began conducting a series of trainings for potential users of the tool.
- D. The [FAQR Field Study Data Mining](#) team completed their additional analysis of the Burkina Faso and Sierra Leone field study data and a first draft of their final report.
- E. The [BHA Population-Based Survey Data Harmonization](#) team presented an update on their progress in harmonizing and pooling data to USAID/BHA, worked closely with the BHA Monitoring and Evaluation team to address issues identified with the datasets provided by evaluation partners, and completed a first draft of their final report.
- F. The Research Engagement on Food Interventions for Nutritional Effectiveness [REFINE Open Access Data Study](#) team presented their preliminary findings and recommendations to USAID/BHA and completed a first draft of their final report.
- G. The FAQR team embarked on a series of discussions related to [Essential Nutrient Fortification](#) with USAID/BHA and select partners, and drafted technical notes to document these discussions and the latest evidence related to vitamins A and D and essential fatty acids in food aid products.
- H. The [Interagency Harmonization](#) team organized planning calls in preparation for the upcoming meetings of the domestic and international interagency working groups to be held in early 2021.
- I. The team managed [The Future of Food Assistance for Nutrition: Evidence Summit II](#) and presented key findings, challenges, and emerging concerns from the event at a webinar hosted by CORE Group's Nutrition Working Group.

II. Key Activities for October 1, 2020-December 31, 2020

Activities listed below are selected to showcase some of the accomplishments of the past quarter. All workstreams had ongoing activities during this quarter.

A. Commodity Incident Reporting Business Process Review

During this quarter, the commodity incident reporting business process review team continued biweekly meetings with the United States Agency for International Development Bureau for Humanitarian Assistance (USAID/BHA). The team completed its review of incidents and informant interviews, and the first draft of the final report, *A Review of the USAID/BHA Food Aid Commodity Incident Reporting Business Process*, was submitted to USAID for comment in November. The report lays out the current commodity incident reporting process and highlights best practices from other U.S. Government and food industry incident management systems. The team also prepared a summary of the final report and presentation slides for the U.S. Government Interagency Technical Working Group meeting and for a meeting with the Massachusetts Institute of Technology Lincoln Laboratory Intelligent Dashboard team to be held in January 2021, as requested by USAID/BHA.

B. Supply Chain Optimization

The supply chain team continued to generate and test scenarios for the global warehouse location model for ongoing and sudden-onset emergency operations. A draft of the final report, *Cost-Effectively Responding to Forecastable and Unforecastable Food Aid Needs: A Supply Chain Demonstration Model*, complete with technical annexes, was submitted to USAID/BHA. Moreover, the team organized biweekly meetings with USAID/BHA personnel to review the team's current works and insights from the demonstration model and to address supply chain issues related to the model. In addition to presenting the findings of finished Ethiopia-related studies, the team shared the global warehouse model's recent analysis with sudden-onset emergency scenarios. The team generated and tested new scenarios about the unavailability of the Mombasa warehouse in the global warehouse location optimization model, and added a sudden-onset surge demand to existing scenarios for Ethiopia and Haiti at USAID/BHA's request. Additionally, the team informed USAID/BHA about the technical components of the demonstration model during the meetings.

C. Cost-Effectiveness

The Food Assistance Cost-Effectiveness Tool for Specialized Nutritious Foods (FACET4SNF) team presented the tool and simulated results at *The Future of Food Assistance for Nutrition: Evidence Summit II* on October 6 and to members of the Inter-Agency Working Group for Specialized Nutritious Food Products during a planning call on October 27. FACET4SNF was officially launched through a webinar held on October 20 that was attended by 117 participants from a wide variety of humanitarian

organizations and developmental agencies. The event included keynote speakers from the FAQR team and USAID/BHA, a live demonstration of the functionality of the tool, a question and answer session, and information on forthcoming live training sessions. A short promotional video produced by the team highlighting the functionality and benefits of using FACET4SNF premiered at the *Evidence Summit II* and was shown during the subsequent presentations, as well. Following the launch webinar, the FAQR team, in collaboration with USAID/BHA, conducted six synchronous training sessions during November and December, including a first session for all trainees focused on the features of the tool related to treatment of moderate acute malnutrition and a second session related to the prevention of child stunting, wasting, and underweight.

D. FAQR Field Study Data Mining

Overall, the field study data mining activity sought to build and expand upon previous Phase III efforts to improve the evidence base for food assistance for nutrition research and programming. During the quarter, the FAQR team completed additional analyses using qualitative and quantitative FAQR field study data, focused on thematic areas related to quality of feeding and care in the household, child growth, and quality of programming in supplemental and blanket feeding programs in Sierra Leone and Burkina Faso. The team finalized a report titled *Additional Analysis of Two Field Studies Comparing Four Supplementary Foods for Treatment or Prevention of Malnutrition*, which included recommendations on future research priorities as well as program design. In addition, the team prepared a draft manuscript on longitudinal timing of child growth faltering in Burkina Faso.

E. BHA Population-Based Survey Data Harmonization

The FAQR team presented preliminary findings and recommendations related to the population-based survey (PBS) data harmonization process and pooled exploratory analyses to members of the USAID/BHA nutrition and monitoring and evaluation (M&E) teams on October 21. The team also worked closely with member of the USAID/BHA M&E team to review and reconcile challenges with provided datasets and inconsistencies between FAQR's findings and those used in USAID/BHA's published evaluations for anthropometric and other values. Revised datasets received from USAID/BHA via evaluation partners were incorporated into the harmonized datasets and exploratory analyses were updated, as needed. The first draft of the final report on this activity, *Population-Based Survey Dataset Harmonization and Pooling: Potential and Challenges*, was submitted to USAID/BHA for review, as well as the harmonized datasets and associated metadata.

F. REFINE Open-Access Data Study

The team submitted a final report to USAID/BHA delineating the Research Engagement on Food Interventions for Nutritional Effectiveness (REFINE) open-access data study activity, *Availability and*

Utility of Open Access Data from Studies on Food Assistance for Nutrition: An Analysis of Publications Archived in the REFINE Database. The report outlined the process of locating open-access datasets underlying published studies archived in the REFINE database, the challenges that hindered use of recovered datasets for pooled meta-analysis, and recommendations for streamlining policies and procedures for making open-access data more FAIR (findable, accessible, interoperable, and reusable). In addition, the team presented an update on their progress to the USAID/BHA team on October 21.

G. Essential Nutrient Fortification

A select group of experts convened for three unique discussions during the months of November and December, organized by the FAQR team, to review and deliberate current USAID specifications for nutrient fortificants in food assistance products. The first two meetings focused on the state of fortification of vitamins A and D in vegetable oil and deliberated differential effects of vitamin forms [D3 vs. D2], toxicity risks, and shelf-life stability of these fortificants, as well as differences in specifications across other agencies. The third meeting examined the ratio of essential fatty acids, omega-3 to omega-6, in ready-to-use therapeutic foods (RUTF) as it relates to the treatment of severe acute malnutrition, and weighed the evidence surrounding strategies to optimize this ratio from production to consumption and related challenges. The team worked closely with USAID/BHA to draft technical notes documenting these discussions and the latest evidence on the biological and physiological mechanisms of absorption and utilization, as well as global prevalence of the respective deficiencies and illnesses in vulnerable populations. The draft technical notes, *Use and Relevance of Vitamins A and D in the Fortification of Vegetable Oil: A Technical Note* and *A Brief Discussion on Essential Fatty Acids in RUTF: A Technical Note*, were distributed to meeting participants for feedback and additional insights.

H. Interagency Harmonization

During November and December 2020, a series of planning calls was organized including representatives from USAID/BHA and the United States Department of Agriculture (USDA) Agricultural Marketing Service (AMS) and Foreign Agricultural Service (FAS) in preparation for the 12th meeting of the USAID-USDA Interagency Technical Working Group on Food Assistance Quality scheduled to be held remotely on January 12-13, 2021. More than 50 representatives from USAID and USDA have been invited to participate, as well as guests from partner organizations. Representatives from the member agencies will provide updates on product specifications, packaging, food safety and quality assurance measures, and research, as well as next steps for sustaining collaboration of the group. Updated terms of reference for the working group will be presented and discussed as the foundation for continued collaboration. In addition to preparations for the domestic interagency meeting, the FAQR team organized two planning calls on October 27 and December 2 for members of the International Inter-Agency Working Group for Specialized Nutritious Food Products in preparation for the 14th Inter-Agency Harmonization Meeting scheduled for early 2021.

I. *The Future of Food Assistance for Nutrition: Evidence Summit II*

The FAQR team hosted *The Future of Food Assistance for Nutrition: Evidence Summit II* from October 5 to 8. The Summit consisted of six concurrent panels related to micronutrients and animal source foods, packaging, alternative formulations, food safety, supply chains, and non-food interventions; five plenary sessions related to new science, continuum of care, strategies, logistics, and knowledge gaps; three special sessions, including a marketplace for new tools and resources, lightning talks related to emerging evidence, and an online poster session; and two keynote addresses by USAID/BHA Assistant to the Administrator Trey Hicks and Acting Deputy Assistant to the Administrator Matthew Nims, as well as daily welcome addresses by other USAID/BHA senior staff. The four-day event was attended by a total of 740 people representing 62 countries, including 43 low- and middle-income countries, and featured 103 speakers from a wide variety of organizations engaged in food assistance for nutrition representing academic institutions, international organizations, non-governmental organizations, research institutes, and the private sector.

Figure 1: Numerical representation of attendees at the *Evidence Summit II*

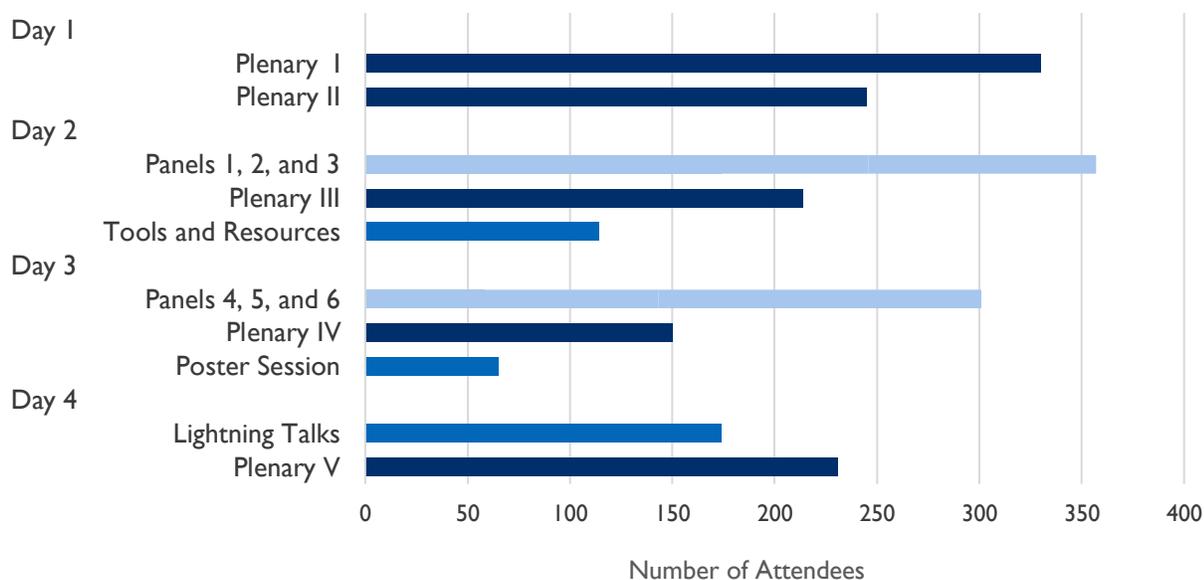
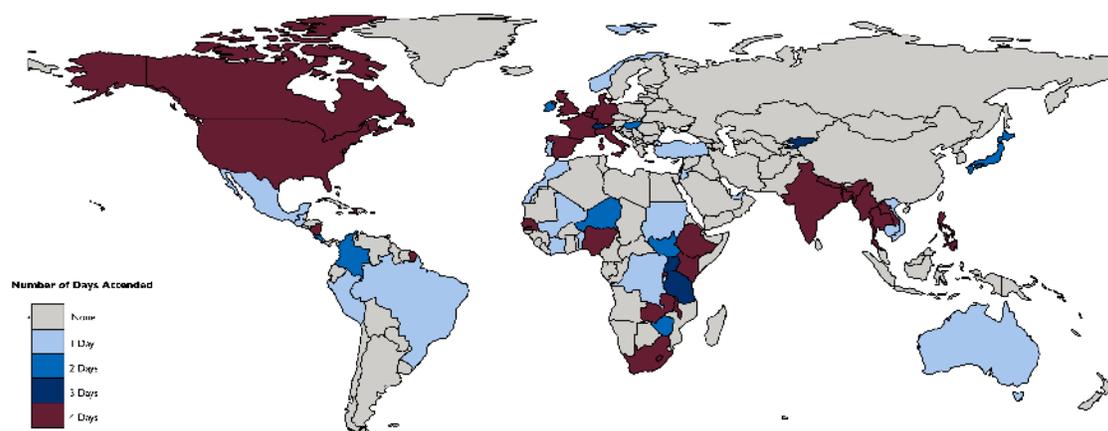


Figure 2: Geographical representation of attendees at the *Evidence Summit II*Table 1: Priority action areas identified at the *Evidence Summit II*

1. Quality standards and common variables are needed so that results can be compared across studies.
2. Cost-effective programming is important when trying to secure the most impact possible with limited resources.
3. Food safety and packaging are essential to the quality of food assistance delivery.
4. Complementary activities could help when food aid products alone are not sufficient.
5. Increased efficiency is possible when the flow of product is optimized throughout the entire supply chain.

The *Evidence Summit II* also illuminated key gaps in the current evidence base:

1. **New evidence is needed.** Cost-effectiveness, specifically assessing value for money, is one of the key drivers of forward thinking and has to be understood in terms of empirical evidence of impact under key conditions. The strength of transparency, comparability, and rigor of evidence allows for optimal use in future dialogues.
2. **Dissemination of research.** Practitioners must be involved with disseminating key questions and answers, including additional information need to better understand relapse.
3. **Increase effectiveness of interventions.** Focus is needed on how to increase impact and decrease the gap of effectiveness from the current state to ensure full effectiveness.
4. **Product formulation and dosage.** Innovative product formulation and dosage specifications need to be explored, including the utilization of animal source foods and other fortification methods for essential nutrients.
5. **Metrics are needed for measuring nutrition.** Additional approaches for measuring recovery of undernutrition need to be explored, such as body composition and neurocognitive function, to fully understand the true meaning of full recovery and the potential for relapse.

6. **Continuum of care.** It is critical to think more holistically about programming approaches by breaking down silos between prevention and treatment, wasting and stunting, maternal and child nutrition, and emergency and development responses, as well as the cost-effectiveness of alternatives and added value of complementary activities.

On December 16, CORE Group's Nutrition Working Group hosted a webinar in which Dr. Webb and Dr. Rogers presented findings, challenges, and emerging concerns from the *Evidence Summit II* to 185 participants. Dr. Rufino Perez offered remarks focused on the importance of the active engagement of the global community through events like the *Evidence Summit II*, continuing to share knowledge in order to create synergies rather than duplicate efforts, and identifying and working to address evidence gaps. Ms. Shelley Walton, co-chair of the Nutrition Working Group, moderated the webinar and concluded by facilitating a question and answer session with participants. The presentations slides and recording of the webinar, as well as for all of the *Evidence Summit II* sessions, can be found on the event page at <https://evidencesummit2.wordpress.com/>.

III. Plans for the Coming Quarter (January 2021-March 2021)

The matrix below highlights some of the key planned activities for the coming quarter.

A. Commodity Incident Reporting Business Process Review
<ul style="list-style-type: none"> • Commodity Incident Reporting Business Process Review: <ul style="list-style-type: none"> ○ Present final workstream results at the 12th USAID-USDA Interagency Technical Working Group on Food Assistance Quality Meeting and to Massachusetts Institute of Technology Lincoln Laboratory Intelligent Dashboard team. ○ Complete revision of the final report and associated summary report to incorporate comments and input from discussions during various team presentations in January. ○ Submit final report to USAID/BHA.
B. Supply Chain Optimization
<ul style="list-style-type: none"> • Scenario Building and Analysis: <ul style="list-style-type: none"> ○ Finalize global warehouse and inventory positioning model and East African port study. ○ Share final findings and insights with USAID/BHA. • Demonstration Model and Tool Development: <ul style="list-style-type: none"> ○ Submit final report on supply chain optimization demonstration model to USAID/BHA. ○ Begin to build data visualization tool to add value to existing demonstration model. ○ Continue developing user manuals for demonstration model and data visualization tool.

C. Cost-Effectiveness

- Food Assistance Cost-Effectiveness Tool for Specialized Nutritious Foods (FACET4SNF):
 - Work with USAID/BHA to refine and co-lead FACET4SNF live trainings.
 - Expand reach of FACET4SNF trainings by targeting relevant agencies with potential users for additional organization-focused live trainings.
 - Continue to develop demonstration case studies and training materials.

D. Data Mining

- FAQR Field Study Data Mining Activity:
 - Receive and address feedback on draft report from USAID/BHA.
 - Submit final report to USAID/BHA.
 - Present final findings and recommendations to USAID/BHA.
- BHA Population-Based Survey Data Harmonization Activity:
 - Receive and address feedback on draft report from USAID/BHA.
 - Submit final report, pooled data, and associated metadata to USAID/BHA.
 - Present final findings and recommendations to USAID/BHA.
- REFINE Open-Access Data Study Activity:
 - Receive and address feedback on draft report from USAID/BHA.
 - Submit final report to USAID/BHA.
 - Present final findings and recommendations to USAID/BHA.

E. Interagency Harmonization

- Domestic Interagency Technical Working Group on Food Assistance Quality:
 - Work with planning committee on final preparations for the 12th U.S. Government Interagency Technical Working Group meeting.
 - Complete and submit final deliverables for activity, including updated terms of reference for working group and communiqué documenting final FAQR-managed meeting.
- International Inter-Agency Working Group for Specialized Nutritious Food Products:
 - Continue holding regular calls to encourage collaboration on priority areas related to product specifications and programming, food safety and quality, and traceability.
 - Organize 14th Inter-Agency Harmonization Meeting in March 2021.
 - Continue discussion of secretariat transition with working group members.

F. Knowledge Sharing

- Research Engagement on Food Interventions for Nutritional Effectiveness (REFINE):
 - Disseminate quarterly Resource Review through Constant Contact with updated email appearance.
 - Update REFINE website with new resources on a monthly basis and regularly tweet about those resources from REFINE Twitter account.
 - Continue sustainability planning for REFINE website, including expanding scope to include broader food assistance research.
- Communications:
 - Maintain and update FAQR website and Twitter account.
 - Share reports and information about events on FAQR website and Twitter.
 - Assist FAQR team members with report formatting and infographics.
 - Assist FACET4SNF team with training and email promotions.
- *The Future of Food Assistance for Nutrition Evidence Summit II:*
 - Finalize and submit report on event to USAID/BHA, including summaries of the sessions, data about the number of attendees and the countries from which they attended, and results of the post-event surveys.
 - Begin planning follow-up Research and Innovation Colloquium.

Annex I. Overview of the Food Aid Quality Review (FAQR) Phase III Activities

For more information on FAQR Phase III, please visit the [FAQR website](#).

I. Background

The Food Aid Quality Review (FAQR) provides the United States Agency for International Development's (USAID) Bureau for Humanitarian Assistance (BHA) and its partners with actionable recommendations on ways to improve nutrition among vulnerable people for whom the direct distribution of food aid can make a significant impact. FAQR Phase I recommendations were published in [Delivering Improved Nutrition: Recommendations for Changes to U.S. Food Aid Products and Programs](#). This report led to FAQR Phase II's focus on reformulating fortified blended foods (FBFs), the inclusion of lipid-based products in BHA's commodity list, and testing new products under field conditions. A full summary of FAQR Phase II accomplishments is highlighted in the [Food Aid Quality Review Phase II Closeout Report](#).

FAQR Phase III¹ focuses on generating links between research on food product formulation and recommendations on cost-effective programming and policy-level action among national and multilateral institutions engaged in food assistance. Tufts University's Friedman School of Nutrition Science and Policy is working closely with domestic and international collaborators, including USAID, United States Department of Agriculture (USDA) and United Nations (UN) partners, all of whom are committed to strengthening the evidence base for the use of specialized nutritious foods (SNFs) for targeted nutrition goals. The work of FAQR Phase III is framed under three major topics related to food aid: **1) Products, 2) Programming, and 3) Processes**.

Products

With a view to making actionable recommendations to USAID, Tufts is examining a number of priority issues, such as how food matrices ("the nutrient and non-nutrient components of foods and their molecular relationship to each other"²) affect bioavailability of nutrients and digestibility of products; the potential for thermal/non-thermal processing technologies to improve food matrices; potential roles for existing products which are rarely used today, as well as new products (which may include fortificant powders) and novel packaging technologies to improve resistance to infestation, shelf life, and efficiency of handling; dual-use products for emergency response; and completion of the data collection, analysis and reporting on field studies which assess the effectiveness and cost-effectiveness of newly-formulated food products for the prevention and treatment of malnutrition in children.

Programming

One important focus of FAQR field research and statistical modeling is the cost-effectiveness of various products used in operational settings. This includes strategy development for pre-positioned SNFPs,

¹ Contract awarded to Tufts University's Friedman School of Nutrition Science and Policy for the period covering Feb. 1, 2016-Jan. 31, 2019 with two option years.

² Source: United States Department of Agriculture: National Agricultural Library (<https://agclass.nal.usda.gov>)

guidance on options for their use, elaboration of a strategy for responding to food needs during initial stages of a sudden onset emergency, and dissemination of cost and cost-effectiveness calculation tools. FAQR is generating improved technical guidance, sharing details on research protocols used in testing new food aid products in the field, and making further progress in harmonizing product specifications among food aid donors.

Processes

FAQR Phase III provides recommendations to USAID on institutional and industry processes for capacity building, including the institutionalization and strengthening of interagency technical collaborations and mechanisms to ensure greater policy and product harmonization domestically and internationally. This work provides recommendations for enhanced supply chain oversight, establishes stronger and more user-friendly quality assurance feedback loops, and promotes food safety and quality standards which can also be applied to local and regional food procurement.

FAQR Phase III organizes its ongoing activities into the following workstreams:

([Additional information is available on the FAQR website](#))

A	Commodity Incident Reporting Business Process Review
B	Supply Chain Optimization
C	Cost-Effectiveness
D	Research: Data Mining
E	Interagency Harmonization
F	Knowledge Sharing

Annex 2. Meetings and Events during the Period October 1, 2020-December 31, 2020

Select meetings include the following:

- ***The Future of Food Assistance for Nutrition: Evidence Summit II (October 5-8, 2020)***

The FAQR project hosted a second Food Assistance for Nutrition Evidence Summit. A full description can be found in [Section II-I](#) above.

- ***FACET4SNF Launch (October 20, 2020)***

The FAQR team hosted a webinar to officially launch the Food Assistance Cost-Effectiveness Tool for Specialized Nutritious Foods (FACET4SNF). A full description can be found in [Section II-C](#) above.

- ***Data Mining Progress Update (October 21, 2020)***

FAQR team members met with USAID/BHA to provide an overview of preliminary findings from the population-based survey data harmonization and REFINE open-access data study activities. A full description can be found in [Sections II-E/II-F](#) above.

- ***Supply Chain Optimization Demonstration Model/Tool Update (November 6, 2020)***

The supply chain team met with USAID/BHA to provide an overview of the current supply chain demonstration model and recent results, as well as to discuss the proposed data visualization tool intended to add value to the model. A biweekly meeting was subsequently established through the end of January 2021. A full description can be found in [Section II-B](#) above.

- ***SNFP Fortification Discussions (November 19, December 2, and December 10, 2020)***

FAQR team members met with USAID/BHA to discuss vitamins A and D and essential fatty acid fortification in food assistance products. A full description can be found in [Section II-G](#) above.

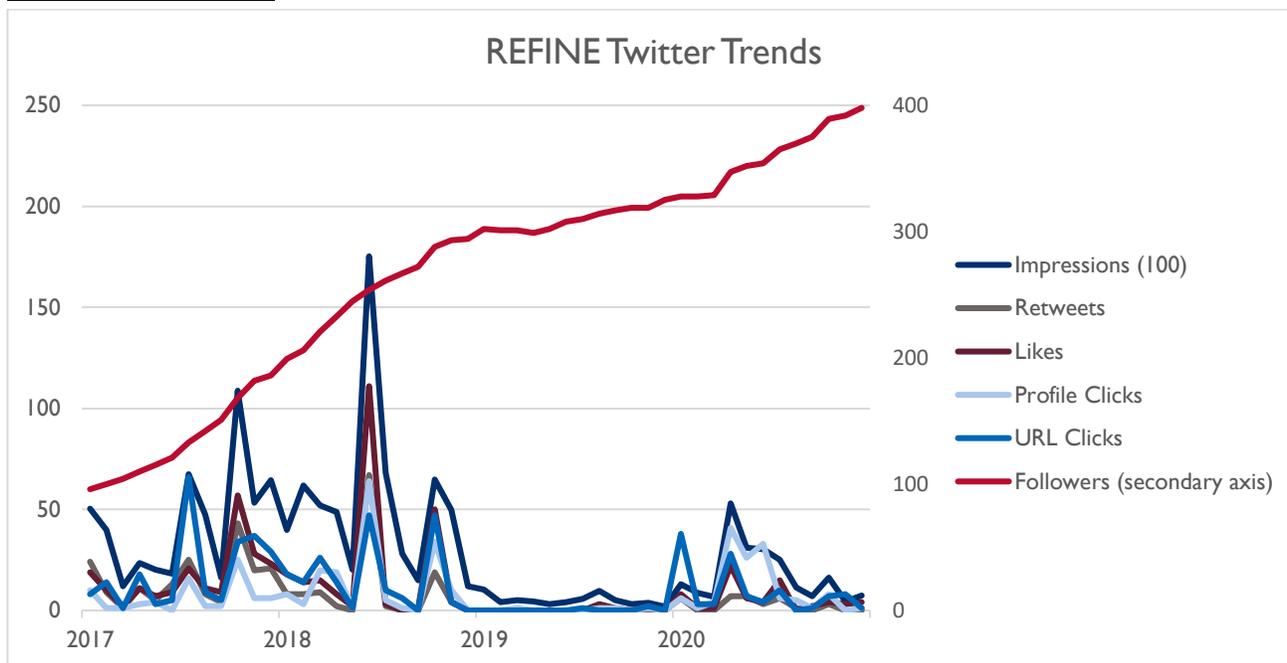
- ***The Future of Food Assistance for Nutrition: Evidence Summit II Findings, Challenges, and Emerging Concerns Webinar (December 16, 2020)***

FAQR leadership presented on findings, challenges, and emerging concerns proceeding from the second Food Assistance for Nutrition Evidence Summit during a webinar hosted by CORE Group's Nutrition Working Group. A full description can be found in [Section II-I](#) above.

Annex 3. REFINe Twitter and Website Analytics

@REFINEnutrition Twitter Analytics (January 2017- December 2020)

Total Followers: 398



www.refinenutrition.org Google Analytics (FY2021 Q1):

	Total Number of Sessions³	New Sessions⁴	Average Pages Per Session⁵
October 2020	358	289	2.03
November 2020	213	173	1.73
December 2020	208	163	1.62
TOTAL	779	625	1.79
July-September 2020	764	598	2.29

³ "Session:" a user's interaction on the site from the time a user logs onto the site until they are inactive on the site for 30 minutes.

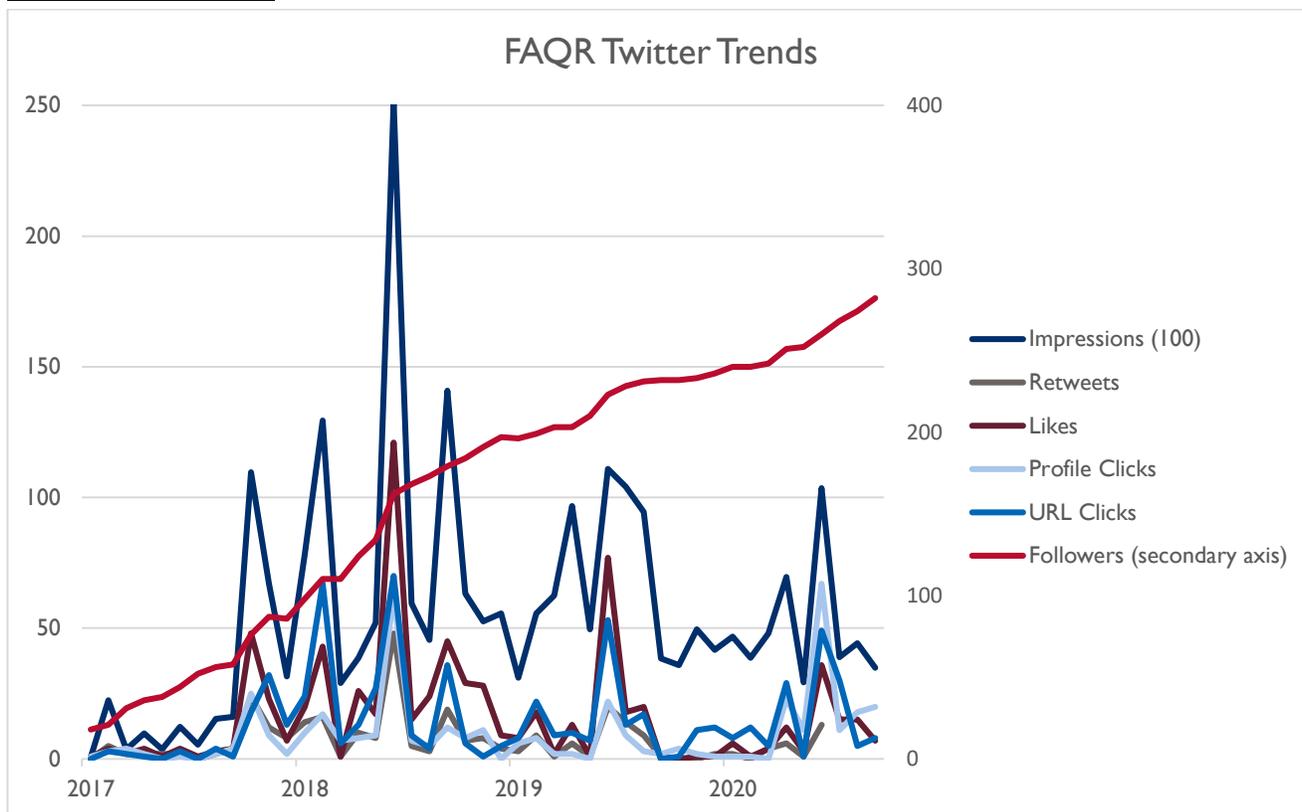
⁴ "New Session:" a user's first visit to the site during that period of Google analytics.

⁵ "Average Pages Per Session:" average number of pages visited by a user during one session.

Annex 4. FAQR Twitter and Website Analytics

@foodaidquality Twitter Analytics (January 2017- December 2020):

Total Followers: 326



www.foodaidquality.org Google Analytics (FY2021 Q1):

	Total Number of Sessions ⁶	New Sessions ⁷	Average Pages Per Session ⁸
October 2020	5,316	2,078	3.66
November 2020	204	111	2.18
December 2020	217	112	2.78
TOTAL	5,737	2,301	2.87
July-September 2020	1,845	1,123	2.46
January 2017-December 2020	20,076	11,779	2.67

⁶ "Session:" a user's interaction on the site from the time a user logs onto the site until they are inactive on the site for 30 minutes

⁷ "New Session:" a user's first visit to the site during that period of Google analytics

⁸ "Average Pages Per Session:" average number of pages visited by a user during one session