EatSafe: Evidence and Action Towards Safe, Nutritious Food

COVID-19 in Traditional Markets - Evidence of Consumer and Vendor Resilience During a Global Pandemic

March 1, 2022
8:00am EST | 2:00pm CET | 4:00pm Nairobi | 7:00pm Dhaka
To ask questions at any time throughout today's event, please click on the Q&A button on your Zoom console.

Today's event will be recorded. After today's session, the recording will be accessible on the GAIN website at www.gainhealth.org

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EatSafe: Evidence and Action Towards Safe, Nutritious Food

EatSafe’s aim is to enable lasting improvements in the safety of nutritious foods in traditional markets with a special focus on consumers.
Objective: To strengthen and provide real-time tracking of vendor and consumer perspectives regarding the health, safety, and resilience of their local markets under COVID-19 contexts.

Methods: Regular surveys and interviews in two traditional markets in six countries from September 2020 to December 2021.

Target Audience: Local market stakeholders, relevant government Ministry representatives and USAID Missions in country

Products: EatSafe produced three report types, 180+ issues over 18 months, and a dashboard to explore trends in food price fluctuations.
EATSAFE Conducted Three Data Collection Activities in Two Markets Across Six Countries.

1. Tracking vendor and consumer perceptions of the health and safety of their market
   - Surveys conducted every two weeks
   - 40 vendors and 40 consumers interviewed
   - Different respondents surveyed each Round

2. Price tracking of local nutritious food
   - Bi-weekly price assessments of a basket of nutritious food from the market

3. Assessing resilience of vendors and consumers
   - Monthly interviews with a panel of 15 consumers and 15 vendors
   - Same respondents surveyed each round
RETROSPECTIVE ANALYSIS

Anthony Wenndt, PhD
Technical Research Specialist, EatSafe
Global Alliance for Improved Nutrition (GAIN)
RESULTS AT-A-GLANCE

Consumer Behaviors
Concern levels mirrored COVID-19 trends
Most consumers reported changes in their shopping behaviors
Protective measures were adopted by consumers to prevent COVID-19

Market Response
Markets generally implemented more response measures over time
Market response measures aligned with best-practices for preventing COVID-19

Business Impacts
Most vendors’ businesses were impacted by COVID-19
Vendors were most concerned about impacts on consumer foot traffic and sales
In mid-2021, COVID-19 surges prompted more vendors to consider leaving their business
METHODOLOGY

Aggregate Survey Results Across Countries

Compute Response Prevalence At Each Time Point

Compute Response Prevalence Across Time Points

Relate to Local COVID-19 Situations

Appraise Key Impacts and Trends
OVERVIEW OF LOCAL COVID-19 EPIDEMICS

New Daily COVID-19 Cases

3-day Moving Average

STUDY TIMEFRAME

Data Source: WHO
UPTICKS IN CONSUMERS’ CONCERNS FOLLOWED MAJOR COVID-19 SURGES

- Most consumers were concerned about COVID-19, especially amid surges
- Peak levels of concern seemed to lag behind COVID-19 peak waves by several weeks
- Times of high concern aligned with low case loads
CONSUMERS’ BEHAVIORS REMAINED CONSTANT EVEN AS COVID-19 CONCERNS DECLINED

- Changes in shopping behavior increased over time
- Even as general concerns decreased, consumers protective behaviors remained consistent
CONSUMERS OBSERVED CONSISTENT MARKET RESPONSES TO COVID-19

- High proportions of consumers noticed market changes
- Bangladeshi consumers’ perception of market changes increased over time, mirroring COVID-19 trends
MARKET RESPONSE PROTOCOL ALIGNED WITH COVID-19 MANDATES & BEHAVIORAL BEST-PRACTICES

- Consumers often reported noticing facemasks and hand sanitization guidance
- Social and communications-based responses were less common
- Market-level cleaning operations were not typically observed

RESPONSES NOTICED BY MOST CONSUMERS
VENDORS REPORTED THAT COVID-19 IMPACTED THEIR BUSINESSES

- COVID-19 impacts on business remained high over the course of the study
- Impacts lessened gradually in Ethiopia and Nigeria
- More vendors considered leaving their business following COVID-19 surges
COVID-19 IMPACTED CONSUMER FOOT TRAFFIC AND VENDORS’ SALES

• Decreases in both number of customers and volume of sales were the most prevalent impacts reported by vendors
• Few vendors reported difficulty transporting produce to the market
• Some vendors reported having difficulty finding wholesale suppliers
• Capital and prices were rarely impacted
THE PANDEMIC DID NOT IMPACT CONSUMERS’ CONFIDENCE IN THE SAFETY OF FOOD IN THE MARKET

- Most consumers maintained high levels of confidence in the safety of food bought from the market.
- Trends were consistent across countries over time.
- Ethiopian consumers consistently had lower levels of confidence in the safety of purchased food.

% OF CONSUMERS WHO BELIEVE THE FOOD IS SAFE

- Bangladesh
- Ethiopia
- Kenya
- Nigeria

Graph showing the percentage of consumers who believe the food is safe over time for each country.
RESILIENCE MARKET RESPONSE

Kathrin Demmler, PhD
Technical Advisor
Global Alliance for Improved Nutrition (GAIN)
We used USAID'S Market Systems Resilience: A Framework For Measurement to develop the survey questions, centered on both behavioral and structural components.
CONNECTIVITY – VENDORS: NUMBER OF CUSTOMERS

In **BANGLADESH** number of customers decreased over time.

In **KENYA** number of customers stayed relatively **stable** over time.
DIVERSITY – CONSUMERS SHOPPING FREQUENCY

Consumer’s shopping frequency decreased over time.
In KENYA vendors difficulty following new rules and regulations due to COVID-19 decreased over time.

In BANGLADESH vendors difficulty increased heavily due to nationwide strict lockdown regulations put in place July 2021.
CONSUMERS’ PERCEIVED FINANCIAL STABILITY

In KENYA consumers perceived financial situation remained unstable over time.

In BANGLADESH consumers’ perceived financial situation improved over time.
BUSINESS STRATEGY – VENDORS
FINANCIAL STABILITY

Vendors financial dependency on borrowed money (paying for unexpected expenses due to COVID-19) increased over time.
RESULTS: FOOD PRICE TOOL DATA

Food price tracking Bangladesh 14 Nov 20 – 06 Dec 21

Average food price differences, 20-21

Food price changes (fish), 20-21
RESULTS: FOOD PRICE TOOL DATA

Average* food price changes 20-21, Bangladesh

**PULSES**
- Chickpeas: 2%
- Lentils: 4%

**ANIMAL SOURCE FOODS**
- Eggs: 7%
- Sour Yogurt: 4%
- Fish: 18%

**VEGETABLES**
- Papaya (green): -24%
- Red amaranth: -8%

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* Based on changes between the months of November and December 2020 and 2021.
COUNTRY SPOTLIGHT: BANGLADESH

Reza Sumon
Project Manager & Co-Lead
Global Alliance for Improved Nutrition (GAIN)
After March 2020, the Bangladesh Government closed schools and universities, and imposed restrictions over offices, courts and factories to fight against the COVID-19 pandemic. Urban way of life was shattered and stagnant.

To keep the urban food supply chain unbroken, wet markets continued in the cities maintaining a limited time period creating an ideal conditions for transmission of virus.
COVID-19 Statistics (Confirmed Cases & Death): March 2020 to December 2021

Bangladesh Situation

1,580,005 confirmed cases

28,034 deaths

Source: World Health Organization
The Bonolota Wet Market is one of Dhaka South City Corporation's largest retail and wholesale wet markets.

Islambagh City Corporation Wet Market is small, but many low-income consumers have daily visits in this market.

Both wet markets were balanced with upper, middle and low-class consumers along with the vendors. In Islambagh wet market, most of the consumers are female.
There occupied a need to assess what were consumers’ and vendors’ perspectives regarding COVID-19 and their knowledge about practicing protective behaviors. Following this, EatSafe collected data from the market.

Prior situation of the wet markets

Before intervention of the EatSafe COVID19 activity, both wet markets environment condition was unhealthy.
Challenges: Data Collection During Covid-19 Pandemic

- It was a big challenge to carry out data collection during countrywide lockdown. All kind of vehicles and offices were closed.

- Seeking permission of City Corporation high officials in inaugurating EatSafe COVID19 response activities in the wet market

- Market committee member were not supportive at the beginning of the data collection.

- There was a possibility of contracting COVID-19 for data collectors
Data Driven Initiatives: Enlightening Market Committees, Development Practitioners and Policy Makers

Exploring concerns of consumers while shopping in the markets during the pandemic

Assessing personal hygiene practices and initiatives taken by market committees

Exploring the changes in food items’ availability, price and supplies in the market

Assessing the effect of COVID-19 pandemic on businesses and consumers’ purchasing behaviors

Understanding the coping mechanism of households and businesses to tackle economic crisis caused by pandemic
The data were cleaned, analyzed and prepared to understand the market condition regarding COVID-19. The team regularly discussed the outcome of data to determine the next steps.

From these analysis, a set of priority tasks were listed for immediate actions based on the data.
Data findings: Engaging Market Committees:

Helped them to know the way forward of work and the immediate actions to take.

Assisted the market committees to understand the lacking and to prioritize the interventions.
Data Findings: Discussing with Dhaka South City Corporation officials

• Data were disseminated to all relevant stakeholders mainly through the multiple events.

• It engaged them with the project, and

• Shared their suggestions assured their increased monitoring in protecting the wet market
Data Findings: Formed Technical Working Group (TWG)

A Technical Working Group (TWG) was formed by the leadership of the Bangladesh Food Safety Authority and with the collaboration of Dhaka South City Corporation. The technical working group provided input and recommendations on –

- Validating the insights generated through the bi-monthly rapid data collection from consumers and vendors
- Identifying the major food safety constraints inside the market and the critical areas of investments
- Reviewing the infrastructural audits and the required changes in the design of the market
- Reviewing and approving the draft BCC materials for the market on COVID-19 recovery and Food Safety
Implementation of Technical Working Group (TWG) Recommendations

From the discussion of the TWG some significant recommendations are following:

• Honorable Councilor, Ward-18, DSCC ASM Ferdous Alam, recommended providing technical support for preparing Black Fungus leaflets. He committed to distributing them among the people of his surrounding area by his management.

• Mr. Babor Ali Mir, Zonal Executive Officer, Zone-3, DSCC recommend bringing all vendors under COVID-19 vaccination.

• Ensure drains are clean and non-existence waterlogged in the wet market.

• Arrange announcement through Imam after salah about Dengue and COVID awareness.

• Arrange consultation box to provide feedback and suggestions to consumers and vendors arriving in the wet market.

• Arranging billboards for guidelines to be done during the stay in the wet market.
BCC Materials Distribution for Both Wet Markets Based on Data
To mitigate urgent risks and improve markets' food and health safety in the short and medium to longer-term, some initiative measures have been taken to strengthen market infrastructure which were reflected through data.
Infrastructural Improvement Activities Based on Data’s Requirement
Vendor and Consumer Affiliation Program
International Day Observation

To make awareness about nutritious safe food and health hygiene in the market we have also celebrated World Food Day, World Water Day, World Health Day.

Media coverage of such day celebration link is given below:


https://www.tbsnews.net/bangladesh/health/call-ensure-safe-healthy-foods-consumers-257785#.YL-LEPZzVlo.whatsapp

https://www.kalerkantho.com/online/national/2021/06/07/1040797
Along with the ‘perception data’ of consumers and vendors, ‘observational data’ collection on market cleanliness, use of mask by consumers and vendors and social distancing practice while shopping or selling in the market is required to explain market behavior.

Overall behavioral changes require more pilot testing and holistic market planning approach which needs to be explored in future.

Inclusion of sourcing price and consumers’ opinions on price and product availability data are also required. It will enrich the collected ‘price data’ and will make it more reasonable.
Sustainability and way forward

- Both wet markets are moving forward to transform into healthier markets, and the consumers are getting aware of safe and nutritious food consumption.

- The two wet markets where we have worked are now ideal models in Dhaka city.

- Members from other market associations, development partners and government officials from different departments frequently visit our market for learning.
The Bazar committee of Mohammadpur Fresh Market in Dhaka North City Corporation area has applied to GAIN to support them in transforming their market into healthier markets.
Thank You
COUNTRY SPOTLIGHT: KENYA

Dorothy Mugane, PhD candidate
Senior Technical Specialist
Global Alliance for Improved Nutrition (GAIN)
COVID – 19 IN KENYA

A new way of life…..
- Partial to full lockdowns
- Restriction of movement
- Dusk to dawn curfews
- Public gatherings banned
- Masks and social distancing mandates
- Office closures
- Market systems disrupted
COVID-19 STATISTICS (MARCH 2020 – DECEMBER 2021)

Kenya Situation

322,781 confirmed cases

5,638 deaths

Source: World Health Organization
Data may be incomplete for the current day or week.
ACTIVITY SITES

Madaraka wet Market, in Thika town, Kiambu County
- Has unique features
- Is the trade corridor to the Northern Kenya counties
- Also serves Machakos, Murang’a and Nairobi counties
- Hosts an average 2500 retail vendors

Marikiti wet market, Machakos town, in Machakos county
- Operates about 2000 vendors daily pre-COVID.
- Number of vendors dropped to about 800 during COVID
- Serves up to 10,000 consumers on a market day before COVID.
- Consumers reduced to below 4000 during COVID 19.
DATA ANALYSIS AND INTERPRETATION

• Sharing with stakeholders
• COVID-Response Units
• Market teams
REGULAR FEEDBACK MEETINGS WITH STAKEHOLDERS

- Improved governance of the market system through regular dialogue platforms.
- Enforcing compliance – market committees took responsibility in fostering collaboration with county governments.
- Informed the county government on priority areas for investment and had a basis for engaging other partners.
Data informed action matrix developed

- National
  - National Technical Advisory Committee
- Sub national
  - COVID-19 Response Unit
- Market committees
  - Market informed, market led
The need to provide regular communication on COVID–19 became apparent.

DATA INFORMED IMMEDIATE ACTIONS

• Machakos photo before  
• Machakos photo After

Infrastructure improvement in Marikiti Market
DATA INFORMED IMMEDIATE ACTIONS – HAND WASHING DATA

Infrastructure improvement in Madaraka Market
Hand washing stations set up
EATSFRE DATA - THE FOUNDATION FOR ONWARD ACTIONS

- Smart markets
- Sub national dash boards
- Food system policies
LEARNING AND ADAPTING

National level events informed by EATSAFE COVID – 19 data
Smart markets were visualized through stakeholder engagement meetings.
SUB-NATIONAL DASHBOARDS

• County governments are open to data sharing through dashboards for better planning and decision making.
• Price monitoring data for priority commodities will provide real-time information for market users.
THANK YOU
ACKNOWLEDGEMENTS

This work was led by GAIN's Country Offices and local Data Management Firms:

**Bangladesh** – Dr Rudaba Khondker and G.M. Reza Sumon + AUREOLIN RESEARCH

**Ethiopia** – Ton Haverkort and Zerihun Zena + ELIAS ASFAW

**Kenya** – Leah Kaguara and Dorothy Mugane + AFRICIAT

**Mozambique** – Gaspar Cuambe and Saskia Julia Cavo + PINE3

**Nigeria** – Michael Ojo and David Atamewalen + KANTAR

**Tanzania** – Enock Musinguzi and Edmin Josiah + AFRICAN INSIGHTS

**Global** – Dr Elisabetta Lambertini, Dr Kathrin Demmler, Dr Anthony Wenndt, Bonnie McClafferty, Caroline Smith DeWaal, Haley Swartz, Abigail Reich and Teale Yalch + RowSquared
EATSAFE’S NEW CHIEF OF PARTY

Richard Pluke
EatSafe Chief of Party
This presentation was made possible through support provided by Feed The Future through the U.S. Agency for International Development (USAID), under the terms of Agreement #7200AA19CA00010. The opinions expressed herein are those of the Global Alliance for Improved Nutrition (GAIN) and do not necessarily reflect the views of USAID or the United States Government.