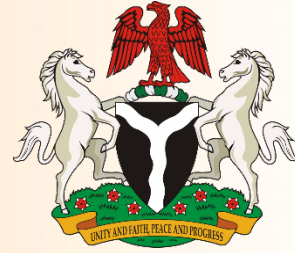




INITIATIVE ON
National Policies
and Strategies



Launch of the Food Security Simulator – Nigeria

Dr. Olivier Ecker (IFPRI)

Stratton Hotel Asokoro

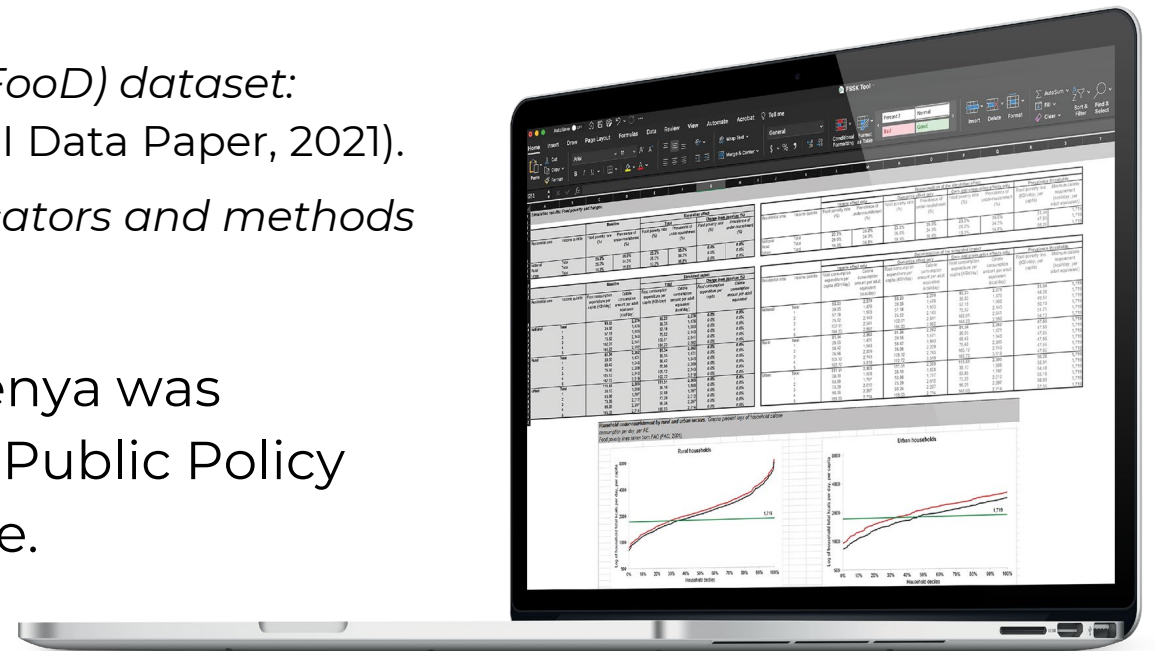
Abuja, Nigeria | 31 October 2023

Motivation and purpose

- Food security in many countries has been impacted by a succession of recent crises.
- Especially when a crisis hits unexpectedly, policymakers need to take quick action.
- To inform such policy action, IFPRI and its partners developed the Food Security Simulator – Nigeria (FSSN) under the NPS Initiative.
- FSSN is an innovative tool for first-cut evaluations of direct, household-level outcomes of economic crises and policy responses in a timely manner.
- FSSN is designed for assessing the potential, short-term impacts of food price or household income changes (“shocks”) on food consumption, diet quality, and other food security indicators among different population groups in Nigeria.

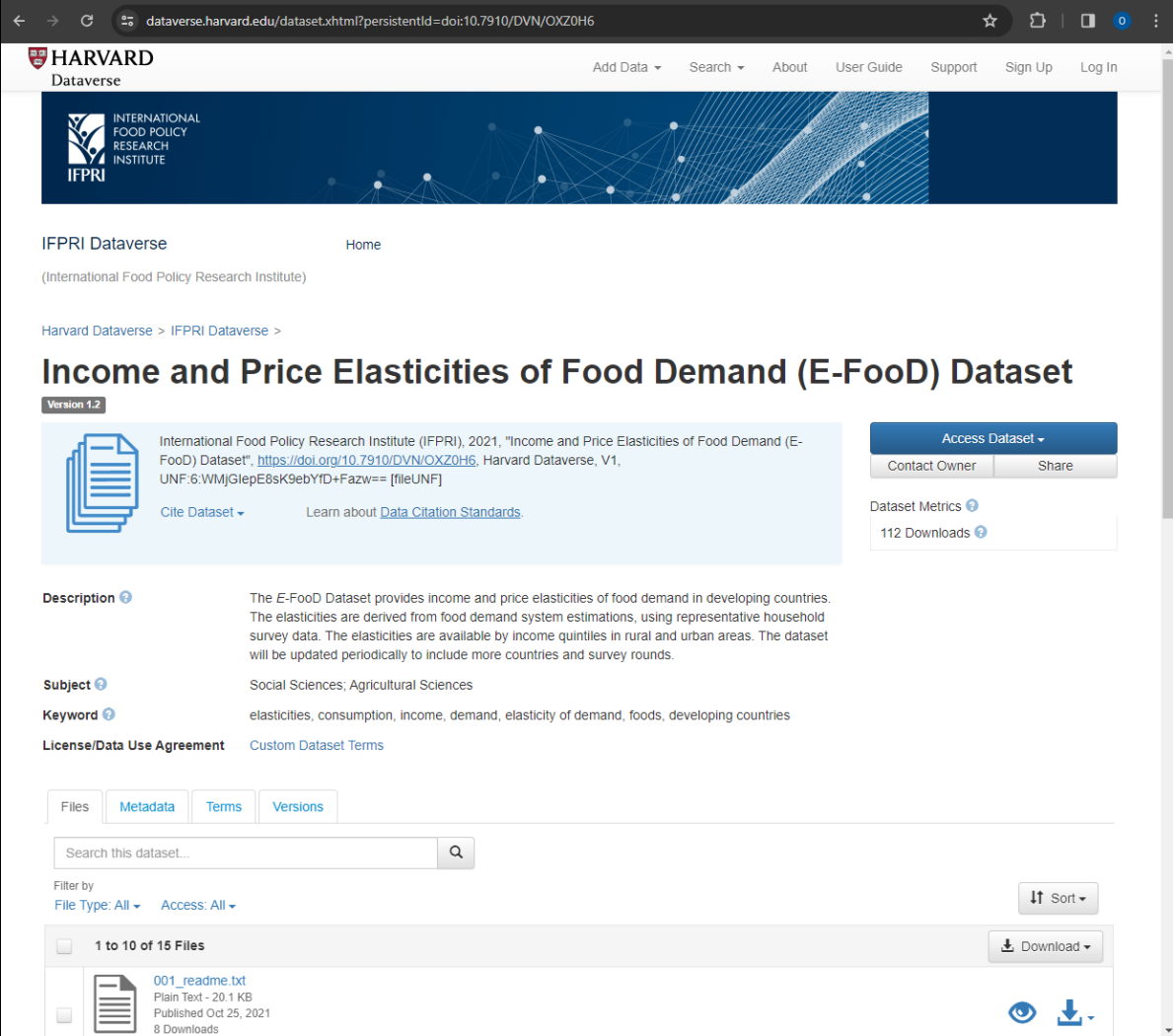
Features of the Food Security Simulator

- Is easy-to-use, with an intuitive Excel-based interface, and has a detailed user guide.
- Provides detailed simulation results tables, but also concise overview tables and graphs for key indicator results (for e.g., export to policy reports or presentations).
- Is based on rigorous research, incl. sophisticated food demand models to capture consumer behavior:
 - *Income and price elasticities of food demand (E-FooD) dataset: Documentation of estimation methodology (IFPRI Data Paper, 2021).*
 - *Measuring changes in diet deprivation: New indicators and methods (Food Policy journal article, 2023).*
- Was piloted using data for Kenya. FSS – Kenya was launched at the annual Kenya Institute for Public Policy Research and Analysis (KIPPRA) conference.



The Food Security Simulator – Nigeria

- Uses recent, representative household survey data: Nigeria Living Standard Survey 2018-19.
- Uses estimated income and price elasticities of food demand, to be published in *E-FooD* dataset V2.0.
- Was refined based on feedback during a recent workshop jointly organized by NBS and IFPRI and additional comments from Nigerian policy analysts.



The screenshot displays the Harvard Dataverse interface for the 'Income and Price Elasticities of Food Demand (E-FooD) Dataset'. The page includes the Harvard Dataverse logo, navigation links (Add Data, Search, About, User Guide, Support, Sign Up, Log In), and the IFPRI logo. The dataset title is prominently displayed, along with its version (1.2) and a blue 'Access Dataset' button. Below the title, there is a 'Cite Dataset' section with a 'Cite Dataset' dropdown and a link to 'Learn about Data Citation Standards'. The 'Description' section provides a detailed overview of the dataset, stating it provides income and price elasticities of food demand in developing countries, derived from food demand system estimations using representative household survey data. The 'Subject' is listed as 'Social Sciences; Agricultural Sciences', and the 'Keyword' includes 'elasticities, consumption, income, demand, elasticity of demand, foods, developing countries'. The 'License/Data Use Agreement' is 'Custom Dataset Terms'. At the bottom, there is a search bar, filter options (File Type: All, Access: All), and a list of files. The first file listed is '001_readme.txt', a Plain Text file of 20.1 KB, published on Oct 25, 2021, with 8 downloads.

Access to the Food Security Simulator – Nigeria

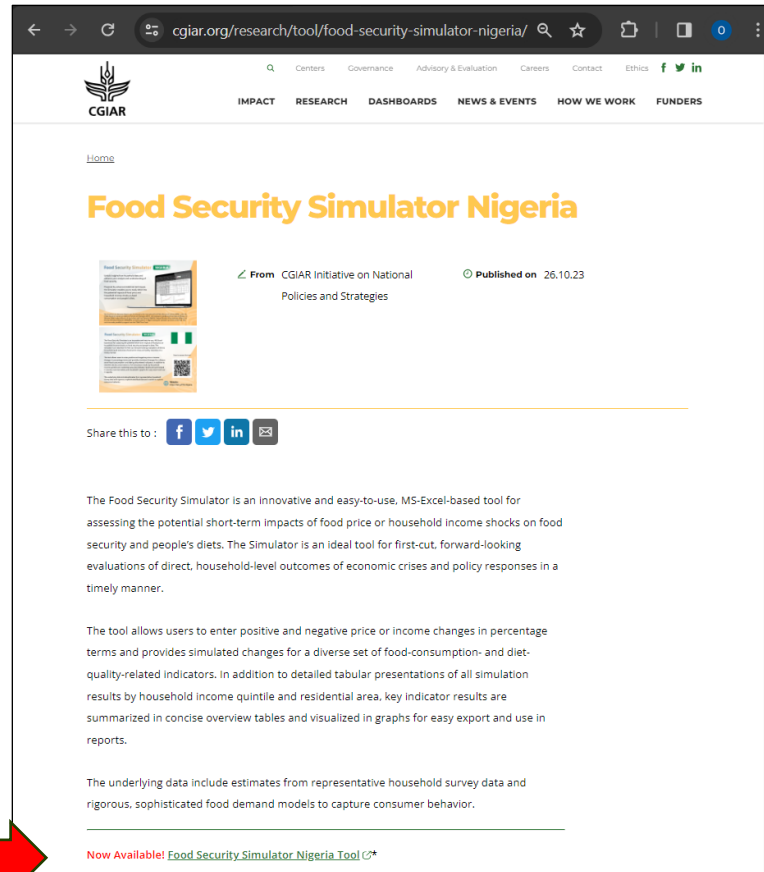
Use URL:

<https://bit.ly/FSS-Nigeria>

Or, scan QR code:



Click link on CGIAR website:



The screenshot shows the CGIAR website with the following content:

- Header: CGIAR logo and navigation menu (IMPACT, RESEARCH, DASHBOARDS, NEWS & EVENTS, HOW WE WORK, FUNDERS).
- Section: **Food Security Simulator Nigeria**
- Text: "From CGIAR Initiative on National Policies and Strategies" and "Published on 26.10.23".
- Share buttons: Facebook, Twitter, LinkedIn, Email.
- Description: "The Food Security Simulator is an innovative and easy-to-use, MS-Excel-based tool for assessing the potential short-term impacts of food price or household income shocks on food security and people's diets. The Simulator is an ideal tool for first-cut, forward-looking evaluations of direct, household-level outcomes of economic crises and policy responses in a timely manner."
- Text: "The tool allows users to enter positive and negative price or income changes in percentage terms and provides simulated changes for a diverse set of food-consumption- and diet-quality-related indicators. In addition to detailed tabular presentations of all simulation results by household income quintile and residential area, key indicator results are summarized in concise overview tables and visualized in graphs for easy export and use in reports."
- Text: "The underlying data include estimates from representative household survey data and rigorous, sophisticated food demand models to capture consumer behavior."
- Footer: "Now Available! [Food Security Simulator Nigeria Tool](#)" with an external link icon.

A red arrow points to the download link at the bottom of the page.

Download from Harvard Dataverse:



The screenshot shows the Harvard Dataverse website with the following content:

- Header: HARVARD Dataverse logo and navigation menu (Add Data, Search, About, User Guide, Support, Sign Up, Log In).
- Section: **IFPRI Dataverse** (International Food Policy Research Institute)
- Section: **Food Security Simulator – Nigeria** (Version 1.0)
- Text: "International Food Policy Research Institute (IFPRI), 2023, 'Food Security Simulator – Nigeria', <https://doi.org/10.7910/DVN/WMN8H>, Harvard Dataverse, V1"
- Buttons: "Access Dataset -", "Contact Owner", "Share"
- Text: "Dataset Metrics", "2 Downloads"
- Description: "The Food Security Simulator is an innovative and easy-to-use, MS-Excel-based tool for assessing the potential short-term impacts of food price or household income shocks on food security and people's diets. The Simulator is an ideal tool for first-cut forward-looking evaluations of direct, household-level outcomes of economic crises and policy responses in a timely manner. The tool allows users to enter positive and negative price or income changes in percentage terms and provides simulated changes for a diverse set of food-consumption- and diet-quality-related indicators. In addition to detailed tabular presentations of all simulation results by household income quintile and residential area, key indicator results are summarized in concise overview tables and visualized in graphs for easy export and use in reports. The underlying data include estimates from representative household survey data and rigorous, sophisticated food demand models to capture consumer behavior."

A red arrow points to the "Access Dataset" button.

Save both files in same folder!

Tool live demonstration

- Brief walkthrough.
- Examples: Simulation of food price and income shocks
 1. Universal staple food price reduction by 20% (e.g., food subsidies).
 2. Uniform household income increase (6.3%), resulting in similar average effects on diet quality nationally (e.g., cash transfers).
 3. Price reduction for vegetables, fruits, pulses, and nuts by 20% (e.g., food vouchers).
 4. Universal grain price increase by 20% (e.g., floods/droughts).

Proposed next steps

- Work with gov't and intl. partners to incorporate FSSN into standard tool kit for food policy analysis and national/state strategies development.
- Train key users and trainers.
- Build on FSSN to expand collaborations and further strengthen analytical capacities (incl. for subnational analysis).



Food Security Simulator

NIGERIA

**Thanks to our
partners and donors:**



The Food Security Simulator – Nigeria was developed by the International Food Policy Research Institute (IFPRI), under the CGIAR Research Initiative on National Policies and Strategies (NPS), with important contributions from National Bureau of Statistics (NBS), Federal Ministry of Agriculture and Food Security (FMAFS), Federal Ministry of Humanitarian Affairs, and Poverty Alleviation Reduction (FMHAPA), and other partners in Nigeria during the validation processes of the tool. This work was made possible by support from the CGIAR Trust Fund.